Appendix U

Emergency Plan
(Included as Attachment to Appendix U-1)

Appendix U-1

RCRA Contingency Plan

RCRA CONTINGENCY PLAN

Shell Chemical Yabucao, Inc.
Yabucoa, Puerto Rico

May 2002

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1.0 INTRODUCTION

1.1 General Facility Description

The Shell Chemical Yabucoa, Inc. (SCYI), formerly Puerto Rico Sun Oil Company LLC, is a crude oil refinery located 2 miles east of Yabucoa, Puerto Rico. Operations at the site commenced in May 1971.

The SCYI complex processes 85,000 barrels per day of crude oil. Major products include: reformate, kerosene, light distillates, white oil, naphtha, jet fuel, diesel fuel, No. 2 fuel oil, desulfurized gas oil, lube oil base stocks, residual fuels, aromatic extracts, slack wax and sulfur. Due to recent reconfiguration in company operations, the SCYI facility is operating at a reduced output. These changes will continue for the foreseeable future.

SCYI generates a number of wastes subject to Subtitle C of RCRA. These wastes are managed in full compliance with applicable sections of 40 CFR Parts 260 through 270 and equivalent Commonwealth of Puerto Rico regulations. At present, SCYI operates a single RCRA-regulated hazardous waste management unit. This unit, the Hazardous Waste Storage Area (HWSA), is used for the storage of hazardous waste generated throughout the site prior to off-site disposal.

The facility is served by several different wastewater collection and treatment systems. The systems are designed to reduce the volume of contaminated wastewater requiring treatment by segregating contaminated and uncontaminated wastewater to the maximum extent possible. At the Refinery Area, collection systems exist for contaminated process wastewater, contaminated stormwater, uncontaminated stormwater, and sanitary wastewater. At the Tank Farm, a collection system is provided for stormwater. Collection systems are provided for stormwater at both the Main Dock and the Barge Dock.

The Resource Conservation and Recovery Act (RCRA) Contingency Plan (Plan) is designed to minimize hazards to human health and the environment posed by fires, explosions or unexpected releases of hazardous wastes or constituents to air, soil, or surface waters resulting from the manufacturing and hazardous waste management activities at SCYI. It is compatible with other contingency plans in effect such as the Spill Prevention Control and Countermeasure Plan, the Storm Water Pollution Plan and the Emergency Response Plan.

The plan will be reviewed and amended when changes to the facility's design, construction, operation, maintenance, or other circumstances increase the potential for an emergency situation to occur. The Plan shall also be amended if:

- The facility permit is revised.
- The Plan fails in an actual or staged emergency.
- The Incident Commander or On-Scene Coordinator changes.
- There are substantial changes to the emergency equipment list.
- The facility design, construction, operation, maintenance, or other circumstances change to increase the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency.

Copies of the Contingency Plan will be maintained at the locations identified below. The Plan will be accessible to appropriate facility personnel at each location.

- The office of all members (including alternates) of the Emergency Management Organization;
- The Waste Management Facility office and control room;
- Each facility building where hazardous waste is generated, stored or otherwise handled or where any potential for fire, explosion or release of hazardous substances exist;
- The residences of the Incident Commander and his alternate, and the On-Scene Coordinators

Copies of this plan have been provided to the following:

- Yabucoa/Humacao Fire Departments
- Yabucoa/Humacao Police Departments
- Civil Defense
- Municipal Hospital
- Humacao Area Hospital
- Ryder Memorial Hospital
- Font Martelo Hospital

An emergency is defined as any explosion, fire, material release, or natural disaster (hurricane, tornado, flood) that has or threatens to destroy property, impair plant operations, or result in a discharge of waste materials to the environment and is beyond the capability of on-

duty personnel to control. This type of emergency may originate from on-plant activity (such as spills, fires, explosion, contractor work, chemical reaction, chemical release), or off-plant activity (such as an aircraft crash on plant property, fire from neighboring property, or natural disasters).

The first consideration in an emergency is always protecting and sustaining human life. Consequently, evacuating the injured from the emergency zone to a safe area and securing medical treatment is always a priority action. The same high priority is also given to protecting occupants in the areas surrounding the plant if an emergency occurs.

2.0 EMERGENCY MANAGEMENT ORGANIZATION

The Emergency Management Organization (EMO) establishes the interaction of key plan personnel in an emergency situation. EMO positions have been related to an existing position within SCYI. An alternate position has also been designated. Positions are identified in the table on the following page. Attachment A ("Emergency Plan") provides more detailed information regarding SCYI's Emergency Response Organization assignments.

The personnel assigned to emergency staff positions have been identified by job description. Emergency Management Organization members have the ultimate responsibility to implement the Contingency Plan. Designated EMO members are qualified and competent SCYI employees who are familiar with SCYI facility operations, waste handling and management practices, locations of waste storage areas, and record-keeping requirements. Furthermore, persons designated as EMO members have the authority to commit the resources necessary to implement the contingency plan.

An Emergency Response Brigade has been established at the SCYI. The Emergency Response Brigade is a group of highly trained individuals who will provide fire fighting, rescue and first aid services for the refinery during major emergency conditions. The brigade is responsible for responding to fires, the threat of a fire, spills occurring at the dock area, and large land spills. Training will be provided to the Brigade members through scheduled training and drills at the refinery and at outside schools such as the Texas A&M Industrial Fire School and/or special training in Puerto Rico. Information regarding responsibilities for the members of the Emergency Response Brigade and Initial Response Team is provided below.

<u>On-Scene Coordinator (On-Site)</u>

The On-Scene Coordinator is normally in the area that is affected by an emergency situation. He/she is either the Operations Manager during normal working hours and/or a Line Supervisor (Shift Foreperson) during off-hours and is familiar with operating procedures for specific areas and specific equipment. This individual is responsible for the supervision of operations in the production unit to which he/she is assigned. If an emergency situation arises he/she assumes the role of On-Scene Coordinator and is responsible for assessing the situation and alerting other areas of the plant as necessary. This person is also responsible for the coordination of emergency services and initiation of evacuation procedures, if necessary.

EMERGENCY MANAGEMENT ORGANIZATION

EMO POSITION	SCYI POSITION	ALTERNATE
Incident Commander***	Site Manager	Production Mgr., HSE Mgr., Commercial Mgr.
********** Field Command Post **********		
On-Scene Coordinator	Production Manager	Operating Specialist
Tactical Officer	HSE Coordinator	HSE Coordinator on Shift
Emergency Response Brigade	Qualified on Shift	All Qualified Brigade Member
Safety Officer	H/S Specialist	PSSR/PSM Coordinator Environmental Specialist
Environmental Officer	Sr. Env. Engineering Specialist	Environmental Specialist
Security Officer	HSE Coord. On Shift	Next Shift HSE Coord. Day Shift HSE Coord.
Command Post Coordination	Env. Technician	Qualified ERB Member
********** Emergency Control Post **********		
Planning Officer***	HSE Manager	PSM Coordinator Fire & Emerg. Resp. Super.
Maintenance Officer	Operating Specialist	E/I Superintendent, Maint. Support Supt., Contract Admin
Logistic Officer	Materials Manager	Materials On-Call
Finance Officer	Financial Director	Comptroller, Inv. & Accounts Payable Supv.
Liaison Officer	E & PS Manager	HR & Community Relations
Emergency Control	PSM & Training Coordinator	HSE Coordinator

Recording Officer	HSE Mgr. Secretary	Tech. Mgr. Secretary
********** Refinery Dispensary **********		
Medical Officer	Refinery Doctor	Ind. Nurse, Yabucoa CDT
Medical Support Advisor	Industrial Nurse	HSE Coord., Contract Doctor
Medical Assistant (Trans. & Rescue)	HSE Coordinator on Shift	Contract Nurse
Emergency Medical Vehicle Operator	Contract Technician	HSE Coordinator
********** Emergency News Center **********		
Information Officer***	HR & Community Relations	HR Analyst, PSM & Training Coordinator
Company Spoke Person	Site Manager	HSE Manager, Production Manager
********** LEPC Center **********		
LEPC Liaison	Env. Specialist	Sr. Env. Engineering Spec., HSE Manager

Note: *** - May operate or move between refinery locations.

Following his/her assessment of the situation, he/she will also notify the Incident Commander.

Whenever there is an imminent or actual emergency situation, the On-Scene Coordinator will immediately evaluate the situation and notify other areas of the facility using the emergency telephone system. He/she will also contact the Incident Commander on-call. The Incident Commander will report for duty and assume responsibility for emergency response activities.

If there is a release, fire, or explosion, the On-Scene Coordinator will immediately identify the type, source, amount, and areal extent of any released materials. Concurrently, he/she will assess the possible hazards to human health or the environment that may result from the release, fire, or explosion. This assessment will consider both direct and indirect effects of the release, fire, or explosion (e.g., the effects of any toxic, irritating, or asphyxiating gases that are generated, or the effects of any hazardous surface-water run-off from water or chemical agents used to control fire and heat-induced explosions).

If the On-Scene Coordinator determines that the facility has had a release, fire, or explosion which could threaten human health or the environment outside the facility, he/she will report his/her findings as follows:

- Following notification of other areas of the plant that may be affected by the emergency, the proper authorities will be notified if any areas outside of the SCYI facility will be affected.
- A decision will then be made as to when to activate the Emergency Response Brigade.
- If necessary, the safety department will be notified to request additional emergency equipment from off-site authorities.
- The Emergency Management Organization will be classified and activated.
- If necessary, assistance will be requested from othef units.

The On-Scene Coordinator will remain available to help appropriate officials decide whether local areas should be evacuated. He will also notify, when necessary, the local police, Local Emergency Response Center, National Response Center (if necessary), and the EQB. When contacting these agencies, he/she will provide the following information:

- His/her name and telephone number.
- Location, i.e., the SCYI facility at Yabucoa, Puerto Rico.

- Time and type of incident (e.g., release, fire).
- Type and quantity of material(s) involved, to the extent known.
- Extent of injuries, if any.
- Possible hazards to human health, or the environment, outside the facility.

During an emergency, the On-Scene Coordinator will take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur or spread to other areas of the facility. These measures will include, where applicable, stopping processes or operations, collecting and containing released waste, and removing or isolating containers. If the facility stops operations in response to a fire, explosion or release, the On-Scene Coordinator will monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment, wherever this is appropriate. Immediately after an emergency, the On-Scene Coordinator will provide for treating, storing, or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire, or explosion at the facility.

The On-Scene Coordinator will ensure that in the affected area(s) of the facility, no waste that may be incompatible with the released material is treated, stored, or disposed until cleanup procedures are completed. He/she will also ensure that all emergency response equipment listed in the Contingency Plan is cleaned, in proper operating condition, and stored in its designated area before operations are resumed.

The On-Scene Coordinator will ensure that appropriate federal and local authorities are notified when the cleanup of hazardous wastes and/or residues resulting from the emergency event is complete. He/she will also notify federal and local agencies that the emergency equipment used has been decontaminated or replaced and is ready for service before resuming operations in the affected area(s) of the facility.

The On-Scene Coordinator is responsible for documenting the incident in the operating record by noting the time, date, and details of the incident that required implementation of the Contingency Plan. Submittal of a written report about the incident to the Administrative Authority is also required. The report will include the following.

- Name, address, and telephone number of the SCYI facility.
- Date, time, and type of incident (e.g., fire, explosion).
- Name and quantity of material(s) involved.

- Extent of injuries, if any.
- An assessment of actual or potential hazards to human health or the environment, where applicable.
- Estimated quantity and disposition of recovered material that resulted from the incident.

Incident Commander

The Incident Commander is the person specified in SCYI's Emergency Implementing Procedure EIP-OOl Notification and Call List (Attachment B) as responsible for the plant. He/she is ultimately responsible for emergency response activities in the event of an emergency. This individual will be notified by the on-site On-Scene Coordinator in the event of an emergency and will oversee the emergency response operations being performed by the designated on-site On-Scene Coordinator.

Initial Response Team (IRT)

The Initial Response Team (IRT) is composed of those SCYI personnel who are the first to respond to an emergency condition. The team will consist of those qualified persons who are nearest to the emergency condition and who have received training in response implementation. The IRT captain is the senior SCYI worker at the scene, typically the area shift foreperson for the area in which the emergency is occurring. The IRT acts under the direction of the IRT Captain until arrival of the OSC. The IRT performs the following activities in response to an emergency:

- Set up appropriate response equipment under the direction of the IRT Captain or OSC;
- Take emergency response action to alleviate the emergency conditions or reduce the threat to the safety of personnel, the Refinery, and the public;
- Request additional assistance if emergency exceeds IRT response capabilities (e.g.., entry, boat operation, equipment operation, firefighting capability);

Upon activation of the Emergency Response Brigade the IRT Captain will provide an adequate briefing of emergency equipment set up and initial response in progress and provide emergency response support as requested.

Emergency Response Brigade (ERR)

The brigade is responsible for responding to fires, the threat of a fire, spills occurring at the dock area, large land spills and any other sever emergency condition. Upon activation, the Emergency Response Brigade will assemble at the fire station under the direction of the ERR Captain. The ERR Captain in coordination with the affected area shift foreperson, and under the direction of the On-Scene Coordinator will be responsible for the following response actions:

Emergency Response Brigade Captain

- Authorize emergency response actions taken to alleviate events at the scene of the emergency.
- Continuously keep the On-Scene Coordinator informed of the conditions and actions at the scene of the emergency.
- Recommend protective actions to the On-Scene Coordinator.
- Recommend upgrade, downgrade emergency classification or terminate the emergency to the On-Scene Coordinator.
- Reports to the scene, establishes communications with the area foreman, On-Scene Coordinator and establishes the Command Post under the direction of the On-Scene Coordinator.
- Receives direction from the On-Scene Commander to dispatch Emergency Response Brigade Members to prescribed areas of the Refinery.

Emergency Response Brigade Members

- The Emergency Response Brigade Members report to the Fire Station to assemble with their squad and await direction from the Emergency Response Brigade Captain.

Additional information pertaining to the Emergency Response Brigades membership, procedures, equipment, and special recognition items is provided in Attachment C.

Materials Advisor

The Materials Advisor at the SCYI normally reviews all purchasing contracts for materials and supplies utilized in the SCYI operations. In the event of an emergency, he/she will coordinate with the Safety Department to arrange for any supplies or emergency equipment that may be necessary for emergency response activities. Previous arrangements have been made

through local suppliers for safety and emergency equipment to be available on a 24 hour a day emergency basis.

The Information Officer or a designated alternate is responsible for informing the news media in the event of a plant emergency at SCYI. Press bulletins and casualty forms have been developed to allow accurate and complete reporting of any emergency situation. These forms are to be completed by the most senior level management employee present and provided to the Spokesperson for release to the public and to the news media.

Additional information on the responsibilities of response organizations and personnel is provided in Attachment A.

3.0 EMERGENCY RESPONSE MANAGEMENT TEAM

The Emergency Response Management Team has been delegated the responsibility for coordinating the emergency response measures described in this Plan. The members of the Emergency Response Management Team are all company employees who have received basic and continuing training as per OSHA's Hazardous Waste Operations and Emergency Response requirements set forth in 40 CFR 264.16.

All members of the Emergency Response Management Team have the authority to commit the resources needed to implement the Contingency Plan during an emergency and are thoroughly familiar and have knowledge of the following:

- Environmental release control procedures;
- All aspects of the Contingency Plan and its procedures;
- All operations and activities at the plant;
- The location and characteristics of hazardous of hazardous wastes and substances at the plant;
- Spill response and emergency equipment lists;
- Emergency notification list;
- Outside emergency contacts;
- Clean up and disposal contractors;
- Medical emergency information;
- The plant layout.

At least one member of the Emergency Response Management Team will be available at all times. The Incident Commander (IC) will be able to respond to any emergency immediately when on the premises.

Table 3-1 lists the members of the Emergency Response Management Team

TABLE 3-1

EMERGENCY RESPONSE MANAGEMENT TEAM

NAME	POSITION	TELEPHONE HOME (H) WORK (W)	HOME ADDRESS
INCIDENT COMMANDER			
Sven Erikson	Site Manager	615-0579 (H) 893-2424 (W)	Fairway Court 754 Palmas del Mar Humacao, P.R. 00791
ALTERNATE INCIDENT COMMANDERS			
Juan M. López	Production Manager	790-3614 (H) 380-0708 (W)	167 Juan B. Huyke San Juan, P.R. 00918
Henry F. McLeod	HS&E Manager	852-9864 (H) 499-5486 (W)	Urb. Los Rosales F-5 2nd Street Humacao, P.R. 00791
Fernando Mateo	Commercial Manager	258-2838 (H) 499-9003 (W)	Urb. Arboleda K-10 Mamey Street Caguas, P.R. 00625
ON-SCENE COORDINATOR			
Juan M. López	Production Manager	790-3614 (H) 380-0708 (W)	167 Juan B. Huyke San Juan, P.R. 00918
ALTERNATE ON-SCENE COORDINATOR			
Eddie Rivera	Sr. Process Engineer II	852-4564 (H) 499-7550 (W)	HC #2 Box 11769 Humacao, P.R. 00791

4.0 EMERGENCY PROCEDURES

SCYI has developed emergency procedures to respond effectively to any emergency situation that may occur at the plant site. General response procedures along with specific procedures, designed to respond to emergency situations, are described in the following sections.

4.1 Notification Procedures

The SCYI facility is designed so that any employee has immediate access to the internal fire/gas alarm system and emergency communications devices such as telephones and portable radios. Emergency communication systems are further described in Section 6.0.

Any employee identifying a fire, explosion or release of hazardous waste or hazardous waste constituents or identifying a situation, must immediately notify the shift foreperson. The shift foreperson will attempt to determine the pource or potential source. If the source is immediately obvious, and the discharge can be stopped without risking his/her health, the shift foreperson should attempt to stop the release. Once the release has been stopped or if its source is not immediately obvious or cannot be safely stopped, the shift foreperson will notify either the On-Scene Commander or the Incident Commander or their alternate(s) listed in Table 3-1 and, if deemed necessary or instructed to do so, will activate internal emergency alarms. In the event that the shift foreperson is not available, the employee must assume the shift forepersons responsibilities.

If, in the judgment of the shift foreperson, the emergency situation is not immediately dangerous to human health or the environment, he/she shall notify the On-Scene Coordinator. The On-Scene Coordinator will be provided with details concerning the situation and will decide what further actions are appropriate.

If, in the judgment of the shift foreperson, the emergency situation presents or is likely to develop into a situation that may require outside help to prevent or respond to serious injury, damage to facilities, or environmental pollution, he/she will immediately contact the safety department and provide the following information:

- Name and telephone number which is being reported.
- Time, type, and current condition of the incident (e.g., release, explosion, or fire) and

location on the site.

- Characteristics and quantity of materials involved.
- Possible hazards to human health or the environment outside the facility, along with conditions capable of spreading of the hazard(s) (e.g., wind direction or water runoff).
- The extent of injuries, if any, and any medical help that may be needed (e.g., ambulance, hospitals, doctors, or emergency rescue teams).

In cases of fire, explosion or major releases of hazardous waste or hazardous waste constituents, the On-Scene Coordinator (OSC) will activate internal alarms or communication systems to notify facility personnel and, if necessary, initiate facility evacuation. If possible, the OSC will concurrently identify the hazardous wastes involved in the emergency and conduct a hazard assessment to determine if evacuation of the local areas is needed prior to initiating notification of the appropriate Federal, Commonwealth or local agencies. Procedures to identify the hazardous wastes involved and to conduct a hazard assessment are described in Section 4.2. This information will allow outside emergency response teams to mobilize in the area with all the necessary response equipment. The OSC will follow the notification list shown in Table 4-1.

Any release to the environment, except a leak or spill of hazardous waste that is less than or equal to one pound and immediately contained and cleaned up, will be reported to the EPA Regional Administrator (Region II) or the National Response Center (NRC) within 24 hours of its detection. The Incident Commander (IC) will provide the EPA/NRC and other agencies with a written document containing the following information:

- Name and telephone number of person reporting the incident;
- Name and address of facility where incident occurred;
- Time and type of incident (e.g., spill, air release, fire or explosion);
- Identity and quantity of the material(s) involved, to the extent known;
- Likely route of migration of the waste;*
- Characteristics of the surrounding soil;*
- Results of any monitoring or sampling conducted in accordance with the release;*
- Proximity to downgradient drinking water, surface water, and populated areas;*
- The extent of injuries, if any;
- The possible hazards to human health, or the environment outside the facility;
- Corrective actions and/or countermeasures taken.

A written document summarizing the information conveyed to the EPA/NRC will be forwarded to the facility management.

Additional information on notification procedures is provided in SCYI's Emergency Implementing Procedure EIP-001 Notification and Call List located in Attachment B.

4.2 Hazard Assessment

4.2.1 Identification of Hazardous Waste Involved

Whenever there is a release, fire or explosion, the OSC will immediately determine the identity, exact source, amount, and areal extent of any released waste.

The identification of the area of the facility affected by the release, fire or explosion will assist the OSC or his/her designee with the following:

- Identification of waste involved in the incident;
- Identification of spill containment and disposal alternatives.

In addition, the OSC will require assistance from the Environmental Engineering Group and/or consult MSDS sheets or other resources to determine the identify of the released material., if necessary. In the event of a release, fire or explosion involving oil and hazardous substances used in the manufacturing process, the OSC or his/her designee will also refer to SCYI's Spill Prevention, Control and Countermeasures Plan, Storm Water Pollution Prevention Plan, and/or Emergency Response Plan.

4.2.2 Assessment of Possible Hazards

Concurrent with the identification of the hazardous wastes involved, the OSC will assess the possible hazards to human health and the environment that may result from a release, fire or explosion. This assessment considers the direct and indirect effects of the release, fire or explosion. Direct effects would include direct contact with released material, fire or explosion. Ingirect effects would inlcude exposure to smoke, organic vapors, toxic, irritating or asphyxiating gases), and the effects of any chemical agent or other waste generated by the response efforts (e.g. hazardous waste run-off from water or chemical agents used to control fire and heat-induced

explosions).

The OSC must initially assess the situation to determine its source, areal extent, migration potential, initial impact to personnel or surrounding environment, and current status (i.e., is the emergency situation controlled or contained). Upon completion of the initial assessment, the OSC will evaluate the incident to determine whether there is any imminent or potential hazards to human health and the environment. Primary considerations for each emergency scenario are summarized below.

Fire: In the event of a fire or potential fire the OSC's detailed assessment of the scene will include determination of the following:

- Explosion potential due to heat generation
- Proximity to adjacent units and their associated risk of explosion or fire
- Potential for generation of toxic gases and direction of wind

Explosion: In the event of an explosion or potential explosion, the OSC's detailed assessment of the scene will include determination of the following:

- The potential for fire associated with the explosion
- Proximity to adjacent units and their associated risk of explosion or fire
- Extent of damage to surrounding structures and equipment
- Risk of subsequent explosion(s) or fire(s)

Release: In the event of a release or potential release of hazardous substances, the OSC's detailed assessment of the scene will include determination of the following:

- Status of release (is it continuous?)
- Potential for and direction of migration if not contained
- Potential for entry into storm sewers and subsequent discharge into local surface waters
- Direction in which hazardous vapors, if any, will travel
- Proximity to ignition sources in the area

4.3 Release Control Procedures

4.3.1 Control Procedures for Operations

All movements of hazardous waste at the SCYI are controlled and monitored by the Health, Safety & Environmental Group (HSEG) and by the operations and maintenance departments. Waste streams are monitored to track the movement of wastes from the point of generation to storage and/or treatment. Each operating section monitors and controls these internal waste transfer operations.

A Hazardous Material Tracking Log and Manifest System is maintained in the environmental section for monitoring and controlling all waste destined for off-site shipment (i.e., containerized waste). Containerized hazardous wastes generated are properly segregated, and where applicable placed on pallets in the HWSA. The environmental engineer maintains a file containing information on the characteristics of all containerized wastes. The tracking system is updated on a weekly basis and is available for use by emergency or regulatory personnel. Original records of the Hazardous Material Tracking System are kept in the HSEG files.

Following the completion of the transfer manifest, all containers to be transferred are inspected. All containers are opened to verify the contents of the container and ensure that the containerized waste is correctly identified and labeled. The maintenance department provides the forklift and personnel to perform any required movement or transfer of wastes. Containerized wastes are transported by moving the pallets on which they are stored by forklift. Personnel involved in the movement or loading of wastes are required to wear hardhats, safety glasses, and chemically resistant gloves. Continuous supervision is provided during all waste transfer operations.

The following list provides some of the operating procedures that are implemented by SCYI to prevent spills or releases during processes such as producing operations, extraction and refining, transportation of products, and marketing of products:

- Personnel review and achieve an understanding of the sequence of operation, rate of transfer, and means of communication. Reduced rates are normally required during change of lineup, topping off tanks, and beginning and terminating transfer.
- Vessels are provided with adequate mooring lines to prevent surging. Mooring lines are

intended to prevent parting or slacking.

- Scuppers on vessels are plugged during transfer.
- During ballasting, cargo pumps are started before opening sea valves and stopped after closing valves.
- Ends of hoses are blanked while being put in place and removed. Drip pans are provided under hose connections.
- Flanges, joints, hoses and loading arms are checked for cracks, weak spots, and points of excessive stress.
- Caution and diligence are required in lining up the cargo system. All valves are checked to see that they are properly set.
- Hoses and loading arms are properly supported.
- Hoses and loading arms or other connecting devices are vented and drained before disconnecting.
- Hoses and loading arms are not allowed to chafe the ship or dock and are not placed in contact with hot surfaces.
- During operation, the transfer system is checked periodically for leakage. The water around the vessel or terminal is also checked for signs of leakage.
- In the event of a spill, transfer is immediately stopped.
- Care is taken to prevent leakage from drip pans.
- Equipment is periodically inspected and tested.
- Blowout equipment is installed and tested for adequate shutdown.

4.3.2 Control Procedures Based on Type of Hazardous Waste Release

The following control procedures are implemented at the SCYI Yabucoa facility.

4.3.2.1 Sudden Hazardous Waste Release

A release of hazardous waste generally refers to a spill or other type of spontaneous discharge of waste to the air, soil, ground water, or surface water.

The HWSA is the only area at the SCYI facility where hazardous wastes are expected to be stored. The possibility of a sudden waste release from this facility is relatively small. The HWSA is used to store containerized waste, and any sudden waste release would involve small amounts of waste.

Sudden waste release involving materials stored in the HWSA could conceivably result from the rupture of a container storing wastes. The possibility of this occurring is minimized by proper handling and storage procedures.

The following procedure will be used to respond to container failure after the proposed modifications to the HWSA are completed if liquid hazardous waste is involved. The liquid will be removed using portable pumps, vacuum trucks, and/or absorbents. Absorbents (if used) would be placed into containers prior to off-site disposal. All pump and vacuum equipment will be properly decontaminated. Following the recovery of all wastes, the concrete slab and all related sumps would be decontaminated.

If a container holding non-liquid hazardous waste fails, the solid material will be removed using a shovel or other acceptable method and then transferred into an acceptable container prior to off-site disposal. Following the recovery of all wastes, the concrete slab and all related sumps would be decontaminated.

In the unlikely event that a spill results from an accident involving a truck transporting hazardous wastes from SCYI process units, the spill will be managed as a non-contained spill. For liquid wastes, absorbents will be used to contain the spill, if possible. Large spills will be contained within the concrete drainage ditches present at the site, and pumped to containers for storage prior to disposal. For non-liquid wastes, the spill material including contaminated soil or debris, if any, will be recovered by placing it into a new container by shovel or other appropriate method.

If a release of hazardous waste occurs such that the reportable quantity (RQ) of the hazardous material or hazardous constituent is exceeded within a 24-hour time interval, then SCYI will, upon discovery of the release, immediately notify the EQB and the National Response Center. SCYI will evaluate the incident to identify the cause of the release and to take steps to prevent a future release.

4.3.2.2 Non-Sudden Hazardous Waste Release

A non-sudden release of hazardous waste generally refers to slow seepage or leakage of hazardous waste from storage. Daily inspections of the HWSA are employed to reveal any non-sudden hazardous waste releases at the HWSA. If leaks are detected, the source of the leak is

identified and repairs are performed to contain the leak. The contents of any container that shows signs of physical deterioration (rust), dents, or seepage will be immediately transferred to an acceptable container. The damaged container will be properly cleaned and disposed or repaired. SCYI will take all measures possible to contain a release from this or any other area and will implement precautions to minimize the opportunity for such a release to occur. SCYI will also investigate the extent of contamination (if any) and will design a response program appropriate to remove or treat any remaining contamination if a leak occurs.

4.3.2.3 Oil Spill

Once a release occurs, every effort must be made to limit both the volume released and the size of the area affected. This not only reduces the loss but simplifies the cleanup and reduces the potential for environmental impact.

Immediate action is required once a spill or a potential spill is detected. The action to be taken must be determined by the nature of the incident and the personnel involved. Experts may be required in such areas as engineering, oil well drilling or production, ship salvage, pipelines, and water quality.

In general, the following rules apply:

- Stop the leak.
- Stop the spread.
- If the spill is on land, prevent it from reaching water.

Releases on land can usually be contained by the use of absorbents, levees, ditches, and pits. Releases which reach water can best be contained by the use of spill booms.

To be effective, the boom must be readily available to permit efficient placement and must be sufficiently light to be handled easily; yet substantial enough to contain the oil, taking into consideration the current and wave action. In general, booms have been quite successful in sheltered waters with currents less than 1 V2 knots. To date, spill booms have not been successful in open seas, rough waters, or fast currents, although several projects are currently in progress attempting to develop booms for open sea use.

The "booming" procedure consists of surrounding the slick with the boom or trapping the slick against some solid barrier. When the slick has been surrounded, its perimeter can be reduced by drawing the boom in from one end. This "piles up" or concentrates the oil and facilitates skimming. The rate of "piling up" must be carefully controlled so the oil does not overflow or escape under the boom. Boom lengths of 200 feet or greater will require a 40 to 50 HP motor to maneuver the boom.

Oil spilled on surface water is best treated by removal, which is best accomplished by skimming. Skimming may be implemented provided the water surface is relatively still.

Absorption of the oil using material such as straw is effective for removing small quantities of oil or when the water surface is rough. Chemical dispersants can be effective in eliminating small slicks, but must be approved by regulatory agencies.

After containment and collection of the spilled oil, the final operational phase is to clean up and rehabilitate the affected area. The goal should be to restore the area as closely as possible to its original condition and to remove, when possible, the evidence of the spill.

The action to be taken, manpower employed, and equipment required for response can vary tremendously depending upon the spilled quantity, nature of the spill, and the location and the area affected. Often times it is most effective to subcontract portions of the work to industrial cleaners; marine, excavation, and landscape contractors; and/or breach cleaning services.

Cleanup and rehabilitation is the most complicated of all oil spill issues as it involves people and private property. Claims must be adjusted without delay and property restored to previous quality. Cleanup work required can include the following:

- Removal of trace oil by absorption or adsorption.
- Disposing of oil-stained vegetation debris, and soil.
- Cleaning of boats, sea walls, and docks.
- Cleaning of beaches and rocky coasts. This problem is particularly acute and difficult to address. The maximum amount of oil should be removed by absorbing with straw or other material. Oil which cannot be absorbed is best treated by allowing it to weather. Weathered oil tends to agglomerate and form balls in the sand that can then be removed by pail and shovel, earth-moving equipment, or beach-cleaning equipment.

Even if the oil is not allowed to weather, it is still best treated by removal. Removal is a very expensive process, and removed sand requires replacement. Covering up the oil with a layer of clean sand usually fails as the oil will migrate to the surface of the sand cover.

Oil tends to adhere preferentially to dry surfaces. As a result, oil released on water tends to collect at the high water mark. Therefore, if the beach is kept wet, clean-up may become easier due to lower oil volumes and reduced adhesion.

The same principles apply to rocky coasts. If oil adheres to rocks, it can be very difficult to remove. Chemical cleaning may not be permitted and steam cleaning or burning are both slow and expensive.

Additional information regarding oil spill response measures is provided in SCYI's Oil Spill Procedures document which is provided in Attachment D.

4.3.2.4 Fires

Should a fire occur at the SCYI facility, the shift foreperson on duty in the affected unit will be immediately notified and provided with the following information:

- Name of person reporting.
- Area of facility where the fire is located.
- Type of material buming (if known).
- Number of casualties (if known).

Following his assessment of the situation and the extent of any release of hazardous materials or wastes, the shift forepcrson, acting as the On-Scene Coordinator, will alert the remainder of the plant via the emergency phone system. If the shift foreperson believes that areas outside of the SCYI facility could be threatened by the fire, he/she will notify the proper authorities.

If necessary, the Emergency Response Brigade will be notified to report to the emergency scene. The Emergency Response Brigade has three fire trucks that are well equipped with bunker gear, foam generators, fittings, and hoses necessary for fire control. The Emergency Response

Brigade has been trained to respond to fires that could occur at the SCYI, and they are familiar with the hazardous characteristics of wastes that could be involved in the fire.

Additional fire control equipment is available at the SCYI in the form of fixed fire hydrants, monitors, and deluges. Fire extinguishers are located throughout the SCYI facility. The three fire trucks and a foam tank truck with an 8,600-gallon capacity are available for fire fighting in the Refinery, Tank Farm, and Dock Areas. Loading arms in the Main Dock Area have sprinkler systems that pump deluge water to assist in fire control. The Barge Loading Facility has an automatic dry-chemical system consisting of carbon dioxide (CO2) cylinders, nitrogen (N2) cylinders, and a 2000-lb capacity dry-chemical tank. Fire extinguishers are available for controlling small intensity fires in all operation areas.

The facility has two (2) fire water basins, one at the Refinery Area and the other at the Tank Farm Area, which provide approximately 4.3 million gallons of water for fire fighting. In addition, there are well water supplies that can be connected to the system if necessary providing approximately 1500 gpm of additional water. There are seven (7) pumps (150 psi-1500-1800 gpm, each) that supply the necessary pressure to meet the facility needs for this purpose. Protective clothing and respirators are provided to protect employees during normal and emergency operations. All facility units have a sufficient number of self-contained breathing packs for members on shift.

At the scene of the emergency, the Emergency Response Brigade will immediately attempt to contain the fire to keep it from spreading to other areas of the plant and igniting other flammable sources. Containment and isolation measures include shutting off services (i.e., electricity, steam, and process steams) to the burning unit; application of water, foam, or other extinguishing material on items and equipment immediately surrounding the affected area; removing flammable containers and other flammable materials from adjacent areas; and excavating trenches or placing nonflammable barriers around the burning units. Once the fire is contained, all efforts will be directed towards extinguishing the fire and containing any release of hazardous materials. Runoff from the area will be contained by a perimeter diking system to prevent uncontrolled runoff of potential hazardous waste from processing areas. The contained runoff will be sampled and analyzed for hazardous characteristics and either released for discharge if nonhazardous or collected and treated or disposed ifjudged hazardous. If it appears the fire cannot be brought under control by the Emergency Response Brigade, the local Fire Department will be notified for assistance.

SCYI will then shut down remaining operations at the plant and sound the evacuation signal. During evacuation, all personnel except those directly responding to the emergency will be directed to a safe and secure position. Once the fire is completely extinguished, cleanup operations will be initiated. The clean-up activities will focus on proper hazardous waste management to ensure waste is not released during the cleanup. If hazardous waste is suspected to be present in the debris, sampling and analysis of materials will be conducted and the material will be managed accordingly.

4.3.2.5 Explosions

An explosion is a large-scale, rapid and violent outbreak or other upheaval of matter causing personal injury or destruction of property. In the event of an explosion, all processes servicing the affected unit will be shut down and the process area will be isolated from the rest of the plant.

4.4 Procedures to Prevent Recurrence or Spread of Fires, Explosions or Releases

During an emergency, the OSC will take all reasonable measures necessary to ensure that fires, explosions, and releases do not occur, recur, or spread. These measures are described below.

4.4.1 Stopping Processes and Operations

During an emergency incident it may be necessary to stop refining processes and/or flow of waste. The OSC will stop the appropriate refining and/or waste generation operations.

Additionally, the OSC will continually monitor process equipment (valves, pipes) for leaks, pressure buildup and gas generation. The OSC will maintain a written log of pressure readings so he may easily identify any abnormal gauge readings. Also, the OSC will monitor for any actual or potential leaks, be it liquid or gaseous.

In the event of a release, fire, or explosion, stopping processes and operations at the facility prevents these events from occurring, recurring or spreading by way of the following:

- Releases and fires will be prevented from spreading by shutting off the source of

hazardous waste.

- Occurrence and/or recurrence of either a release or spill will be prevented since additional waste will no longer be transported to the location of the incident.
- Explosions will be prevented from occurring or recurring by eliminating pressure buildup and also by controlling the occurrence, recurrence and spreading of fires.

4.4.2 Collecting and Containing Released Waste

In the event of a release, fire, or explosion, collecting and containing released waste at the facility prevents these events from occurring, recurring or spreading by way of the following:

- Releases and fires will be prevented from spreading to other areas onsite as well as offsite.
- Occurrence and/or recurrence of a fire or explosion will be prevented by isolating the material

Released waste will usually be collected and contained in the secondary containment systems available at drum handling areas, loading/unloading areas, and tank farms. Treatment and/or disposal of the material will depend upon the classification of the material.

If the released waste reaches areas outside the secondary containment systems it will be necessary to contain and/or collect it with inert absorbent materials such vermiculite, sand or other specialized absorbents available in the market. The recovered absorbent material impregnated with the released waste will be drummed for characterization and disposal.

If large quantities of waste are released beyond the secondary containment system a trench may be excavated on the downgradient side to collect the released waste and transfer it to suitable containers for disposal. Contaminated soil will be removed and drummed for characterization and disposal.

4.4.3 Removing or Isolating Containers

In the event of a release, fire, or explosion, removing and isolating containers of released waste at the facility prevents these events from occurring, recurring or spreading. By removing containers from the scene of the emergency they are no longer susceptible to any real or potential

fire or explosion which may compromise their integrity and lead to the spread, occurrence, or recurrence of a release, fire, or explosion.

During a release, fire, or explosion, efforts will be made to isolate the container involved in the emergency. In addition to providing secondary containment systems, SCYI has an inventory of spill control materials and equipment. Small volume containers (e.g. drums) involved in an emergency situation, will be isolated by placing inert absorbent material or sand on the perimeter of the area affected. This will prevent spread of contaminants or runoff beyond the source area.

Once the emergency situation has been controlled, all containers involved in the incident will be immediately removed from the affected area. If the container is in good condition it will be taken to the HWSA for storage.

4.4.4 Explosion Prevention

In the event of a fire at the facility, the OSC must make a determination as to the likelihood of an ensuing explosion. Important circumstances associated with a fire which the OSC must consider include its source, extent, area of impact, and proximity to adjacent tanks or piping. Methods by which the risk of explosion can be reduced are given below.

- Stop hazardous waste transfer,
- Check pressure relief valves on tanks to make sure they are open,
- Direct available fire fighting water on those tanks and pipes which are exposed to the extremely high temperatures associated with a fire. This should reduce the risk of pressure buildup and the possibility of a subsequent explosion(s).

4.4.5 Storage, Treatment and Disposal of Released Materials

The OSC will provide for storing, treating, or disposing of recovered waste, contaminated soil or water, or any other material that results from a fire, explosion or release at the facility.

Recovered material will be stored in compatible drums and sent to the Hazardous Waste Storage Area. Recovered liquid waste will be characterized, if necessary, to determine the best treatment and disposal option. Based on its characteristics, such waste will be treated either at the

WWTP or sent to the Hazardous Waste Storage Area.

4.4.6 Procedures for Decontamination and Post-Emergency Equipment Maintenance

The OSC will ensure that all emergency equipment either used or not used for emergency responses is operable, cleaned or replaced and fit for its intended use before operations resumed.

Most personal protection materials such as chemical coveralls and gloves are of the disposable type, therefore, these will be placed in drums for disposal. Other, non-expendable equipment, will be cleaned as per manufacturer's specifications, inspected and placed back in service. Specific procedures for decontamination of major pieces of equipment are described below:

- Respirators: Rubber components of respirators will be soaked in soap and water and scrubbed with a brush. Any leather or cloth components or the respirator, which cannot be decontaminated, arc to be discarded. Respirator canisters will be checked for serviceability as well as expiration date. Regulators will be cleaned and maintained according to manufacturer's recommendations.
- Personnel Protective Equipment: Reusable personnel protective clothing will be decontaminated either through machine washing or hand washing utilizing a water/detergent solution.
- Monitoring Equipment: Monitoring equipment will be inspected and cleaned according to manufacturer's specifications.

In some instances, clothing and equipment will become contaminated with substances that cannot be removed by normal decontamination procedures. In these cases, a solvent may be used to remove such contamination if it does not destroy or degrade the protective material.

A decontamination station will be established in a suitbale area to decontaminate response equipment that can be rinsed with solvents and/or water. The rinsates will either be collected in drums or sent to the WWTP depending on its characteristics. Once decontaminated, the equipment will be inspected and tested as required and returned to its pre-designated location. The location of the decontaminion station will be based on the location of the emergency spill but will be selected to ensure that contaminated rinsewater is not releases to surrounding areas.

SCYI safety personnel of personnel from other Sun Company facilities inspect and maintain fire fighting equipment within 24 hours after an emergency situation.

All expendable materials used during a response to an emergency will be restocked as soon as practicable.

TABLE 4-1

EMERGENCY NOTIFICATION LIST

Emergency Response	
National Response Center	(800)424-8802
Environmental Protection Agency - San Juan Caribbean Field Office	(787) 729-6951 729-6922
U.S. Coast Guard - San Juan, Main Operator Emergency Rescue Line	(787) 729-6800 729-6770
Environmental Quality Board-Central Office Environmental Emergencies	(787) 767-8181 766-2823
Puerto Rico Department of Natural Resources	(787) 724-8774
Civil Defense	(787) 893-3190; 852-4044
Fire Departments	
Yabucoa Fire Department	(787) 893-2330
Humacao Fire Department	(787) 898-2330
Police Departments	
Yabucoa Police Department	(787) 893-2020
Humacao Police Department	(787) 893-2020
Hospitals	
Municipal Hospital (Emergencies) Municipal Hospital (Administrator)	(787) 893-7788 (787) 893-2355
Humacao Area Hospital	(787) 852-3975
Ryder Memorial Hospital	(787) 852-0768
Font Martelo Hospital	(787) 852-2424

5.0 EVACUATION PLAN

The SCYI has developed an Evacuation Plan to allow the safe and efficient evacuation of all on-site personnel from the plant site, as shown in Figure 5-1. This Evacuation Plan consists of detailed procedures to be implemented when the OSC in the affected area decides that evacuation is necessary to prevent the undue exposure of personnel to hazardous or potentially hazardous circumstances. The procedures established in the Evacuation Plan will be followed as closely as possible. If necessary, the OSC may deviate from these established procedures if, in his or her judgment, a more effective alternative is necessary to bring the situation under control.

During an evacuation, everyone in the affected area will be evacuated except those authorized personnel who are necessary to bring the emergency situation under control. Only the OSC and other qualified personnel are authorized to remain inside the boundary limits established for the affected area. In situations where evacuation is necessary due to factors such as release of toxic gas, only the boardperson will remain within the affected unit. The boardperson will be provided with a supply of compressed air so he can continue to monitor functions within the unit. All other personnel will remain outside these limits unless their assistance is requested by the Incident Commander.

Evacuation procedures will be initiated when the On-Scene Commander (OSC) or designated Senior Technician sounds the siren during an emergency. The SCYI has warning sirens that are used to notify personnel of the release of toxic gas. These sirens can be heard plant-wide.

The OSC will also inform other areas of the SCYI with an assessment of the emergency condition through the emergency telephone system. The OSC will recommend which areas, if any, should be evacuated. Detailed information concerning the evacuation of specific areas of the SCYI facility is provided in the Emergency Action Evacuation Plan provided in Attachment E.

The planned routes for evacuation (see Figure 5-1) provide for sufficient aisle space to be maintained at the SCYI to allow unobstructed movement of personnel, fire protection equipment, and decontamination equipment to any area of the facility. During an evacuation, the following procedures will be followed:

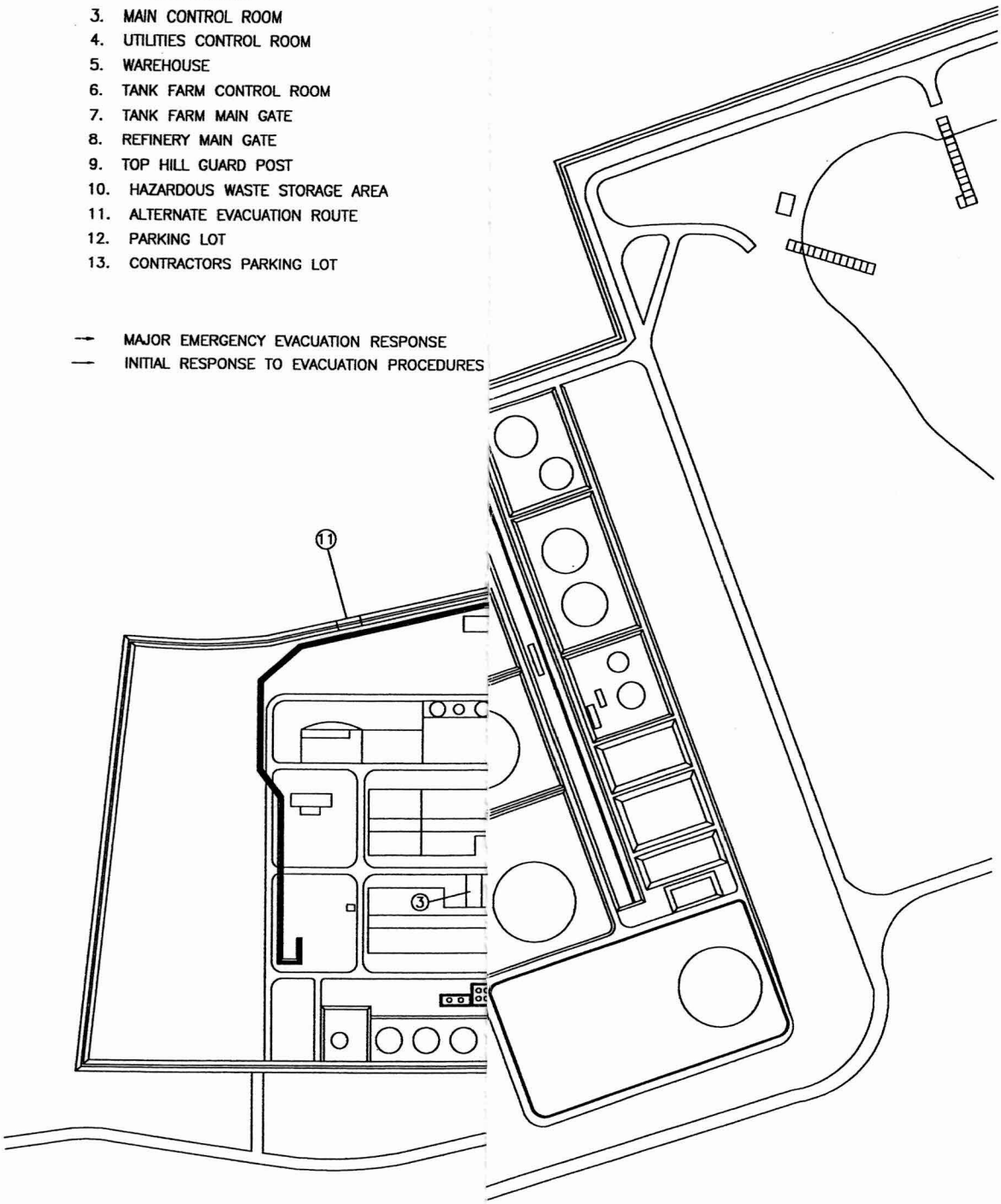
- The siren for plant evacuation will be activated.

- The guards will immediately open the main gate. No further entry of visitors, contractors, or trucks will be permitted. All vehicle traffic within the plant will cease to allow safe exit of personnel and movement of emergency equipment.
- No persons will remain or re-enter the affected area except authorized personnel required to bring the situation under control. Normally, only supervisory personnel, fire brigade personnel, and emergency teams will remain within the affected area.
- All persons will assemble at their designated assembly points. Specific details concerning alternate assembly areas are included in the SCYI Emergency Action Evacuation Plan (see Attachment E).
- All persons will be accounted for by their immediate supervisors. Contract forepersons will account for their personnel and report to the front gate.
- The names of fire brigade anchor emergency team members involved in emergency response will be reported, in writing, to the front gate by designated response team personnel.
- Affected areas of the facility will be thoroughly searched for personnel. However, no lives will be endangered in an attempt to find persons not accounted for.
- In all questions of accountability, immediate supervisors will be held responsible for those persons reporting to them. Visitors will be the responsibility of those employees they are seeing. Contractors are the responsibility of those persons administering the individual contracts. The guards will aid in accounting for visitors, contractors, and truck drivers by referring to sign-in sheets.

EXPLANATION

1. ADMINISTRATION BUILDING
2. SERVICE BUILDING
3. MAIN CONTROL ROOM
4. UTILITIES CONTROL ROOM
5. WAREHOUSE
6. TANK FARM CONTROL ROOM
7. TANK FARM MAIN GATE
8. REFINERY MAIN GATE
9. TOP HILL GUARD POST
10. HAZARDOUS WASTE STORAGE AREA
11. ALTERNATE EVACUATION ROUTE
12. PARKING LOT
13. CONTRACTORS PARKING LOT

→ MAJOR EMERGENCY EVACUATION RESPONSE
— INITIAL RESPONSE TO EVACUATION PROCEDURES



SHELL CHEMICAL YABUCOA INC.

FIGURE 5-1

EVACUATION PLANNING MAP

ANDERSON-MULHOLLAND & ASSOC., INC

SCALE	AUTOCAD FILE #	DATE
DR: _____ CH: _____		April 1998

6.0 DESCRIPTION OF EMERGENCY COMMUNICATION SYSTEMS

Internal communication systems (radio, telephone, and paging systems) capable of summoning emergency assistance from the On-Scene Coordinator and/or security personnel and guards, have been implemented. The alarm system at the SCYI facility consists of two distinct signals, which can be heard throughout the facility. A gas warning alarm is intended to alert personnel that hazardous concentrations of hydrocarbons or other harmful gases may be present. The alarm consists of a harsh intermittent grading sound. A fire alarm is sounded when there is a fire at the refinery. The alarm consists of a continuous air horn blast. Both of these alarms are tested every Friday at noon.

6.1 Communications with Community

The primary means of communication between the Refinery and the Yabucoa Police Department is the commercial telephone system.

Initially, the On-Scene Coordinator is in charge of communications with the community. Once the LEPC Liason is activated, this person will be the primary contact to the community. At the emergency location, the Incident Commander is in charge of offsite communications.

Communications among the Command Post, Security Main Gate, Emergency Control Center, Refinery Medical Facility, Emergency News Center and Assembly Areas can be accomplished using normal Refinery telephones, and the Refinery radio network. Communications available at each emergency response facility are as follows:

<u>Command Post</u>

- One cellular telephone
- One refinery radio (9FRKQ)
- One Marine radio
- Six portable radios (2 FRKQ)

<u>Security Main Gate</u>

- 8888 emergency telephone
- Normal refinery phones
- Base station radio control

- Refinery paging and beeper systems

Emergency Control Center

- 8888 emergency telephone
- One normal refinery extension
- One outside telephone line
- One marine radio
- One facsimile line (in engineering)
- One base station radio

Emergency News Center

- Three normal refinery extensions
- Telephones will be made available for use by the news media
- One facsimile line

Refinery Medical Facility

- Normal refinery phones
- One outside telephone line
- One portable radio

6.2 Medical Support Facility Communications

Communications between SCYI, Yabucoa Municipal Hospital, Ryder Memorial Hospital and medical support facilities will be by commercial telephone. Ryder Memorial Hospital has prearrangements for selections of hospitals by intercommunications with other ambulances and hospitals when the hospital space is limited.

6.3 Alerting Emergency Response Personnel

Notification of Refinery personnel will be completed through a combination of radios, pagers, alarms and proceduralized telephone calls. Refinery emergency response personnel not on site at the time of the emergency will be notified by pager or by telephone call using the commercial telephone system.

6.4 Emergency Communications Systems

6.4.1 Radio System

The following radio systems are in service at the Yabucoa Refinery. Each system is independent of the others, and will be discussed separately. All of the major systems shown here will appear on the consoles at the Main Gate and the Emergency Command Center.

- Channel "1" is one of the four channels used by Operations, and is assigned to the Crude, Reformer and Utilities areas. It is a repeater system with the transmitter located at the Main Control Room, has a backup battery to provide at least 24 hours of uninterrupted operation, and is wired to the control room emergency generator.

- Channel "2" is a separate Operations channel, and is assigned to the Solvent/MEK area. It is a repeater system with the transmitter located at the Main Control Room, has a battery backup to provide at least 24 hours of uninterrupted operations, and is wired to the control room emergency generator.

- Channel "3" is a separate Operations channel, and is assigned to the Hydrogen area. It is a repeater system with the transmitter located at the Main Electrical sub-station, has a battery backup to provide at least 24 hours of uninterrupted operation, but has no provision for emergency generator service.

- Channel "4" is the Oil Transfer or Tank Farm channel. It is a repeater system with the transmitter located at the Tank Farm Control Room, has a backup battery to provide at least 24 hours of uninterrupted operation, and has emergency power from the Tank Farm generator.

- Channel "5" is the Maintenance charmel. It is a repeater system with the transmitter located at the Main Electrical sub-station, has a backup battery to provide at least 24 hours of uninterrupted operation, but has no provision for emergency generator service.

- Channel "6" is the Plant Protection and Emergency Response channel. It is a repeater system with the transmitter located on the hill top at Mariana, has a backup battery to provide at least 24 hours of uninterrupted operation, and a 1400 watt portable generator, stored at the Main Gate, that can be taken to Mariana in the event of prolonged power outages. The control station located at the Emergency Command Center provides the link from the consoles to the repeater, but has no provision for battery backup.

- Channel "7" is used for local paging, in conjunction with the repeater at Mariana. This repeater has a battery backup to provide at least 24 hours of uninterrupted operation, and like the Plant Protection channel, a 1400 watt portable generator, stored at the Main Gate, that is available in the event of prolonged power outages.

A second repeater is located Gurabo peak, and is used when making pages into the San Juan area, either from the console, or through the telephone. This repeater is located in space leased from Motorola, and has alternate power provided by a generator located on the site.

The control station for this system is located in the Emergency Command Center, and provides the link from the consoles and dialup pager encoder, to the selected repeater. There is no battery backup provided for this transmitter.

- Channel "8" is the Emergency Brigade channel, and is restricted to those portable and mobiles used by the Emergency Brigade. This is a simplex system with the base station located at the Emergency Command Center, and a position on the radio control console in the Emergency Command Center, but not in the console at the Main Gate.

- Channels "9, 10, 11 and 12" are the four "chatter" channels that provide frequencies that can be used by anyone, primarily Maintenance, to work on particular jobs that do not require a repeater or base station. An example of this would be a pair of electricians installing cable or calibrating instruments, and they would not interfere with anyone else.

6.4.2 Paging System

Pagers are provided to all Emergency Response Brigade members and Production Department personnel working in the Refinery Area. Pagers provide audible instructions to personnel in the event of an emergency. The paging system consists of a telephone dial-up encoder located at the Emergency Command Center and a manual encoder located in the consoles at both the Main Gate and the Emergency Command Center. Any of the encoders can select either the repeater at Mariana or Gurabo, depending on the coverage desired. The paging system can also be activated from any facility telephone. When using the telephone system, dial "61" to select the Mariana repeater, or dial "62" to select the Gurabo repeater. If the console is used to make a manual page, the "MarianalGurabo" switch on the paging module is used to determine which area of coverage is desired.

The console encoders are the sole alerting unit for the Emergency Response Brigade. The dial-up encoder is programmed not to accept emergency pages, but in case of console failure, is capable of being re-programmed for back up use. The dial-up encoder can also be programmed to substitute page numbers in the event of a pager failure. The instructions are located with the dial-up encoder.

6.4.2 Beepers

Beepers are used to notify SCYI response personnel who do not have a pager in the event of an emergency. The beeper system can be activated by phone or by the console at the main gate. Beepers may be contacted individually, in groups, or all beepers may be activated simultaneously. Beepers allow for alphanumeric messages to be transported to necessary personnel.

6.5 Communication Control

6.5.1 Control Stations

Each of the operating areas have a control station, (a small, low power, multi-channel base station), that provides access to each of the five plant repeater channels, and the chatter channels. These units will not have access to the plant protection or the emergency response channels. The advantage of this method is that it eliminates the use of plant wire lines, and

provides each operating position with access to the other operating channels as needed, and back up channels control in case of normal channel repeater failure. Each of the control stations in the Main and Utilities control rooms are wired into the respective UPS systems for uninterrupted operation. No other battery backup power is provided.

6.5.2 Control Consoles

Located at the Main Gate and the Emergency Command Center are control consoles that provide an integrated operation of all of the major radio systems. Any of the systems may be accessed from either location, (except the Emergency Response system), and may even be cross connected if necessary. Functions other than plant radio controls are included in the consoles, and are listed below. A complete set of console operating instructions are maintained at each location.

6.5.3 Other Console Functions

- Marine channel 19A base for communicating with the tug boats, ships and certain department personnel.
- Monitor only for marine channel 16, the calling and emergency frequency, as required by law.
- Monitor only the NOAA weather channel, with an alert function to notify the console operator of any weather emergency.
- Control of the Main and Plant vehicle gates. The consoles have been programmed to operate the turnstile and pedestrian gates once they are made operational.
- Unique paging coding functions for emergency response alerting.

<u>In the Main Gate console only</u>:

- Fire alarm panel for the reporting of alarms from the warehouse and financial office.
- Intrusion alarms from the water wells.
- The plant security CCTV system.

6.6 Communication System Test

Communication channels with Response Organizations will be tested, using the extensions in the Security Main Gate, Emergency Control Center, Command Post, and Oil Spill boat. The pager and beeper systems are tested daily. In addition, all emergency communications systems are operationally checked at least monthly. All communications procedures and systems are also tested annually.

7.0 COORDINATION AGREEMENTS

Special arrangements have been made with local and federal government agencies and community hospitals to ensure a well organized and efficient response to emergencies.

The existing Plan has been forwarded to relevant local authorities. This revised Plan will be forwarded to the same authorities upon approval by EPA. Cooperative agreements between SCYI and local authorities will be modified and formalized to reflect the revised Plan. Copies of agreement letters will be sent to EPA upon receipt by SCYI. A list of authorities to be notified is presented below:

Local Authorities	Primary Responsibility	Support Services
Police Department	Yabucoa Police - 893-2020	Humacao Police - 852-2020
Fire Department	Yabucoa Fire Department 893-2330	Humacao Fire Department 852-2330
Emergency Response	Environmental Quality Board 767-8181 Puerto Rico Department of Natural Resources 724-8774	Civil Defense 893-3190 852-4044
Hospitals	Municipal Hospital Emergencies - 893-7788 Administrator - 893-2355	Humacao Area Hospital - 852-3975 Ryder Memorial Hospital - 852-0768 Font Martelo Hospital - 852-2424

7.1 Fire Department

A cooperative agreement has been discussed between SCYI and the Fire Department for the control of hazardous waste and/or flammable liquids fire incidents in SCYI's facilities.

Fire Department personnel have been familiarized with materials handled, products and wastes generated, the locations of areas within the plant where personnel normally work, the location of plant entrances, internal access roads. ln addition, a summary of available emergency equipment, its location throughout the plant, and evacuation procedures and routes, were provided.

7.2 Police Department

A cooperative agreement has been discussed between SCYI and the Police Department for the control of hazardous waste incidents in SCYI's facilities that may require Police Department assistance in maintaining site security and crowd control.

Police Department personnel have been familiarized with materials handled, products and wastes generated, the locations of areas within the plant where personnel normally work, the location of plant entrances, and internal access roads. In addition, a summary of available emergency equipment, its location throughout the plant, and evacuation procedures and routes, were provided.

7.3 Civil Defense

A cooperative agreement has been discussed between SCYI and the Civil Defense for control of hazardous waste incidents in SCYI's facilities.

Civil Defense Department personnel have been familiarized with materials handled, products and wastes generated, the locations of areas within the plant where personnel normally work, the location of plant entrances, and internal access roads. In addition, a summary of available emergency equipment, its location throughout the plant, and evacuation procedures and routes, were provided.

7.4 Hospitals

Cooperative efforts have been discussed between SCYI and the following community hospitals: Humacao Area Hospital, Ryder Memorial Hospital and Font Martelo Hospital.

Community hospitals in the area have been familiarized with the chemical compounds used during the refining activities and the safety procedures and/or medical treatment that may be followed or implemented in case of employee injury during an emergency incident. Community hospitals were also briefed on SCYI's contingency plans and procedures.

Coordination letter agreements are sent to local emergency response organizations every time the Contingency Plan is amended. In addition, drills and training arc provided to the municipal emergency response team on an annual basis at the facility premises. The facility has its own ambulance services; however, when more than one ambulance is needed arrangements have been made with the Yabucoa Hospital and Humacao District to provide ambulance support for the refinery, if required. This additional assistance would be requested through the Yabucoa and Humacao District Civil Defense Office.

Local authorities having primary emergency response roles and those offering support and services are listed below. SCYI has also made arrangements with area hospitals to provide emergency treatment. These hospitals have been familiarized with the properties of hazardous wastes handled on-site and the type of injuries that could result from emergency situations, such as fires or explosions. The Contingency Plan is distributed to these organizations upon its approval by the USEPA.

Table 7–1. Types and Location of Spill Control and Response Equipment and Materials, Yabucoa, Puerto Rico

OIL SPILL EQUIPMENT AND MATERIAL INVENTORY

DATE: JULY 1995 — OIL SPILL BOATS EQUIPMENT – TANK FARM AREA

ITEM	ORIG QTY	ACT QTY	SERIAL #	SERVICE	MODEL	NAME
TRIMARAN OIL SPILL BOAT TRAILER	1	1	PR–1294BB	Boom Deployment	N/A	
140 HP MOTOR FOR TRIMARAN	2	2	G–7457024/25	Boat Powering	J140TXCUA	JOHNSON
PER. FLOATING DEVICE (WORK VEST)	6	6	160.053./7/1	Life Savering	8211 TYPE V	ATLANTIC PACIFIC MFG. CO.
MEDIUM ANCHOR W/O ROPE	2	3	N/A	Boat Anchoring	N/A	DAN FORTH S–1600 STD
LARGE ANCHORS W/O ROPE	4	4	N/A	Boat Anchoring	MO–11683–TD	DAN FORTH S–1600 STD
LARGE ANCHORS WITH ROPE	2	3	N/A	Boat Anchoring	MO–11683–TD	DAN FORTH S–1600 STD
BOOM RECOVERY HOOKS	2	4	N/A	Boom Handling	HOOK MATE/6'	BOAT HOOK
YELLOW NILON ROPES W/HOOKS	3	3	N/A	General Use	N/A	
NYLON ROPES	11	11	N/A	General Use		
MOORING BUOY PHOSPHORESCENT	3	2	N/A	Boom Installation	RED BUOY	N.A TAYLOR CORP.
BATTERIES (1 SPARE AT M.P.)	3	2	N/A	Motor Starting	78PLTS/751 AMP	ENERGETIC POWER
GAS TANKS	2	2	N/A	Gas Storage	HOME–MADE	STAINLESS STEEL
FIRE EXTINGUISHER	1	1		Fire Fighting		ANSUL

DATE: JULY 1995 — OIL SPILL BOATS EQUIPMENT – TANK FARM AREA

ITEM	ORIG QTY	ACT QTY	SERIAL #	SERVICE	MODEL	NAME
BOSTON WHALER BOAT W/TRAILER	1	1	PR–1293–BB	Boom Deployment		BOSTON WHALER
90 HP MOTOR B/WHALER BOAT	1	1	1809098	Boat Powering	E90TLCCA	EVENRUDE V4
PER. FLOATING DEVICE (WORK VEST)	4	4	160.053./7/1	Life Savering	8211 TYPE V	ATLANTIC PACIFIC MFG. CO.
BATTERY FREE MAINT.	1	1	2854747	Motor Starting	475AMP	
BOAT ROWS 8'	2	2	N/A	General Use		
LARGE ANCHORS WITHOUT ROPE		1	N/A	Boat Anchoring		DAN FORTH S–1600 STD
LARGE ANCHORS WITHOUT ROPE		1	N/A	Boat Anchoring		DAN FORTH S–2 1/2 STD
PHOSPHORESCENT BUOY		1	N/A	Boom Installation		

DATE: JULY 1995 — OIL SPILL VAN EQUIPMENT – TANK FARM AREA

ITEM	ORIG QTY	ACT QTY	SERIAL #	SERVICE	MODEL	NAME
OIL RECOVERY PUMP W/HOSES	1	1	SEUVE5ACP	Oil Collection	27A91038	BRIGGS AND STRATTON MOTOR
PLASTIC LIFE BOATS (RAFTS)	2	2	160.027./60/0	Hauling	624	ATLANTIC PACIFIC
DISPERSANT (5 GAL PAILS)	40	27	N/A	Oil Dispersion	COLD CLEAN 500	ESSEX
SIGNAL LIGHT	4	4	N/A	Communication	PAT–1.080.316	PARALTA
BOAT FENDER 8" X 20"	3	2	N/A	Boat Protection	1026	

Table 7–1. (Continuation)

DATE: JULY 1995 OIL SPILL VAN EQUIPMENT (CONT.)

ITEM	ORIG QTY	ACT QTY	SERIAL #	SERVICE	MODEL	NAME
VAN TRAILER	1	1	CTV 105002–5	Equip/Mat. Storage	TYPE 2A5778	ICT
ANCHOR MARKER BUOYS	7	5	N/A	Boom Installation	N/A	
YAMAH 4HP MOTOR	2	2	GEO S 143082	Oil Collection	4 AC	YAMAH 4
GAME FISHER "SEARS"	2	2	SEAN 6991M84B	Spill Cleanup	12	GAME FISHER
FISHER	1	1	OMCS9758D393 FMC95161C989	Spill Cleanup		FISHER
BOOM REPAIR RUBBER ROLL	1	1	N/A	Boom Repair	N/A	
OIL SORBENT 151 TOWELS	8	11	TYPE–151	Oil Collection	M–10793	3M
RAKE	1	1		Spill Cleanup		
SHOVELS	3	3		Spill Cleanup		
PITCH FORK	1	1		Spill Cleanup		
DISPERSANT SPRAY PUMP W/HOSES	1	1	822500	Dispersant Applic.	81 1/2 P47A–6	G.R. MOTOR
DISPERSANT SPRAY NOZZLE	1	1	N/A	Dispersant Applic.	N/A	
MACHETE	1	1	N/A	Vegetation Removal	N/A	
DISPERSANT SPRAY PUMP W/HOSES	1	1	822500	Dispersant Applic.	81 1/2 P47A–6	G.R. MOTOR
BOOM SHORE STAKES	8	8		Boom Anchoring		
SLICK BAR	2	2	30365KEV088/MKE	Oil Containment		
STICK BAR	6	6		Oil Containment		
EMPTY CANS (5 GAL)	4	4		Liquid Storage		
GLOVES (WORKING) PAIRS	24	24		Personal Protection		
HANDI WIPES	2	2		General Use		
YELLOW ROPES 25 FEET	6	6		General Use		
WHITE ROPE WITH CHAIN	8	8		General Use		
LESTOIL CLEANER	2	2		Detergent		
MARKER BOUYS	18	20		General Use		
IGLOO 10 GALON	1	1	30G	Water Dispensing	30 VIKING	
ANCHORS	2	2		Boat Anchoring		
RUBBERMAID 10 GALON	1	1		Water Storage		
ANCHORS W/O ROPES	18	18		Boat Anchoring		
APROX. 4500 FEET OF BOOM	1	1	N/A	Oil Containment	N/A	N/A
SLIDE CONNECTOR (universal type)	1	1		Boom Connection		
6'FREE BOARD & 12'DRAFT	1	1		Boat Operation		

Table 7–1. (Continuation)

DATE: JULY 1995 OIL SPILL WAREHOUSE EQUIPMENT – REFINERY AREA

ITEM	ORIG QTY	ACT QTY	SERIAL #	SERVICE	MODEL	NAME
DISPERSANT TANK	1	1	N/A	Dispersant Storage	N/A	N/A
FIBER PEARL SACKS 18 LBS	384	200	N/A	Oil Collection	N/A	N/A
BOSTON WHALER MOTOR 90 HP	1	1	N/A	Boat Powering	E90TLCCA	EVENRUDE V4
140 HP TRIMARAN MOTOR	1	1	N/A	Boat Powering		
OIL SORBENT 157 TOWELS (BALES)	–	7	TYPE–157	Oil Collection	M–10792	3M
OIL SORBENT 270 BOOMS	–	8	TYPE–270	Oil Collect./Contain.	M–10788	3M

DATE: JULY 1995 OIL SPILL EQUIPMENT – REFINERY AREA

ITEM	ORIG QTY	ACT QTY	SERIAL #	SERVICE	MODEL	NAME
VACUUM TRUCK	1	1	N/A	Oil Skimm./Storage	GMC	General Motor Company

Puerto Rico
Sun Oil Company

JOHN M. SHEA
President and
Refinery Manager

September 26, 1996

Cap. Josué Piñeiro
Fire Department Director
Miguel Caillas Final Street
Humacao, PR 00791

Captain Piñeiro:

Enclosed is the information related to hazardous wastes management at the Puerto Rico Sun Oil Company (PRSOC). This information is being submitted to local authorities accepting to participate in the PRSOC familiarization program, as required by regulatory agencies and as stated in 40 CFR §265.37 and EQB's Regulation for the Control of the Hazardous and Non Hazardous Waste (RCHNHSW) Part I-810 G.

This information will acquaint you with our operations thus allowing for an efficient use of your services in case of need.

Thanks for your interest in participating in our program. As an acknowledgment of the receipt of this letter, please sign the attached copy and send it back to us.

If you have any question regarding the information included, contact our Environmental Engineer, Carlos R. Martínez at (787) 893-2424 ext. 2431.

Cordially,

John M. Shea

mdh

Enclosure

10/15/96
1:00 PM

Puerto Rico
Sun Oil Company

JOHN M. SHEA
President and
Refinery Manager

September 26, 1996

Mrs. María T. Domínguez
Font Martelo Hospital Administrator
Font Martelo Street
Humacao, PR 00791

Mrs. Domínguez:

Enclosed is the information related to hazardous wastes management at the Puerto Rico Sun Oil Company (PRSOC). This information is being submitted to local authorities accepting to participate in the PRSOC familiarization program, as required by regulatory agencies and as stated in 40 CFR §265.37 and EQB's Regulation for the Control of the Hazardous and Non Hazardous Waste (RCHNHSW) Part I-810 G.

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Cordially,

John M. Shea

mdh

Enclosure

10/15/96
1:15 P.M.
Ana J. Serano
Administración

Puerto Rico
Sun Oil Company

JOHN M. SHEA
President and
Refinery Manager

September 26, 1996

Mr. Juan Figueroa
Civil Defense Director
9 Cristobal Colón Street
Yabucoa, PR 00767

Mr. Figueroa:

Enclosed is the information related to hazardous wastes management at the Puerto Rico Sun Oil Company (PRSOC). This information is being submitted to local authorities accepting to participate in the PRSOC familiarization program, as required by regulatory agencies and as stated in 40 CFR §265.37 and EQB's Regulation for the Control of the Hazardous and Non Hazardous Waste (RCHNHSW) Part I-810 G.

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Cordially,

John M. Shea

mdh

Enclosure

10/15/96
11:00 AM
Nancy I Sánchez

SUNOCO Puerto Rico Sun Oil Company

JOHN M. SHEA
President and
Refinery Manager

September 26, 1996

Mr. Saúl Adorno
Civil Defense Director
Humacao, PR 00791

Mr. Adorno:

Enclosed is the information related to hazardous wastes management at the Puerto Rico Sun Oil Company (PRSOC). This information is being submitted to local authorities accepting to participate in the PRSOC familiarization program, as required by regulatory agencies and as stated in 40 CFR §265.37 and EQB's Regulation for the Control of the Hazardous and Non Hazardous Waste (RCHNHSW) Part I-810 G.

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Thanks for your interest in participating in our program. As an acknowledgment of the receipt of this letter, please sign the attached copy and send it back to us.

If you have any question regarding the information included, contact our Environmental Engineer, Carlos R. Martinez at (787) 893-2424 ext. 2431.

Cordially,

John M. Shea

10/15/96

1:10 pm

mdh

Enclosure

Puerto Rico
Sun Oil Company

JOHN M. SHEA
President and
Refinery Manager

September 26, 1996

Lt. Pedro L. Pérez
Humacao Police Department
Font Martelo Street
Humacao, PR 00791

Lieutenant Pérez:

Enclosed is the information related to hazardous wastes management at the Puerto Rico Sun Oil Company (PRSOC). This information is being submitted to local authorities accepting to participate in the PRSOC familiarization program, as required by regulatory agencies and as stated in 40 CFR §265.37 and EQB's Regulation for the Control of the Hazardous and Non Hazardous Waste (RCHNHSW) Part I-810 G.

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If you have any question regarding the information included, contact our Environmental Engineer, Carlos R. Martínez at (787) 893-2424 ext. 2431.

Cordially,

John M. Shea

10/15/96
12:45

mdh

Enclosure

Puerto Rico
Sun Oil Company

JOHN M. SHEA
President and
Refinery Manager

September 26, 1996

Mr. Pedro A. Vázquez
Fire Department Director
18 Luis Munoz Rivera Street
Yabucoa, PR 00767

Mr. Vázquez:

Enclosed is the information related to hazardous wastes management at the Puerto Rico Sun Oil Company (PRSOC). This information is being submitted to local authorities accepting to participate in the PRSOC familiarization program, as required by regulatory agencies and as stated in 40 CFR §265.37 and EQB's Regulation for the Control of the Hazardous and Non Hazardous Waste (RCHNHSW) Part I-810 G.

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If you have any question regarding the information included, contact our Environmental Engineer, Carlos R. Martínez at (787) 893-2424 ext. 2431.

Cordially,

John M. Shea

John M. Shea

mdh

10/15/96

Enclosure

11:00

Puerto Rico
Sun Oil Company

JOHN M. SHEA
President and
Refinery Manager

September 26, 1996

Lt. José J. Ramos
Yabucoa Police Department
P.O. Box 428
Yabucoa, PR 00767

Lieutenant Ramos:

Enclosed is the information related to hazardous wastes management at the Puerto Rico Sun Oil Company (PRSOC). This information is being submitted to local authorities accepting to participate in the PRSOC familiarization program, as required by regulatory agencies and as stated in 40 CFR §265.37 and EQB's Regulation for the Control of the Hazardous and Non Hazardous Waste (RCHNHSW) Part I-810 G.

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If you have any question regarding the information included, contact our Environmental Engineer, Carlos R. Martínez at (787) 893-2424 ext. 2431.

Cordially,

John M. Shea

mdh

Enclosure

10/15/96
10:30 AM

Sgto. Jorge Ruiz de Jesus 8-1673

Puerto Rico
Sun Oil Company

JOHN M. SHEA
President and
Refinery Manager

September 26, 1996

Mr. Amed Alvarez
Regional Hospital Administrator
Family Health Center
Humacao, PR 00791

Mr. Alvarez:

Enclosed is the information related to hazardous wastes management at the Puerto Rico Sun Oil Company (PRSOC). This information is being submitted to local authorities accepting to participate in the PRSOC familiarization program, as required by regulatory agencies and as stated in 40 CFR §265.37 and EQB's Regulation for the Control of the Hazardous and Non Hazardous Waste (RCHNHSW) Part I-810 G.

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If you have any question regarding the information included, contact our Environmental Engineer, Carlos R. Martínez at (787) 893-2424 ext. 2431.

Cordially,

John M. Shea

John M. Shea

mdh

Enclosure

10/15/96
12:15

Puerto Rico
Sun Oil Company

JOHN M. SHEA
President and
Refinery Manager

September 26, 1996

Mr. Rogelio Diaz
Doctor Domínguez Hospital Administrator
Font Martelo Street
Humacao, PR 00791

Mr. Díaz:

Enclosed is the information related to hazardous wastes management at the Puerto Rico Sun Oil Company (PRSOC). This information is being submitted to local authorities accepting to participate in the PRSOC familiarization program, as required by regulatory agencies and as stated in 40 CFR §265.37 and EQB's Regulation for the Control of the Hazardous and Non Hazardous Waste (RCHNHSW) Part I-810 G.

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Cordially,

John M. Shea

mdh

Enclosure

10/15/96

12:35 PM

Puerto Rico
Sun Oil Company

JOHN M. SHEA
President and
Refinery Manager

September 26, 1996

Mrs. María del C. Villega
Municipal Hospital Administrator
Family Health Center
Yabucoa, PR 00767

Mrs. Villega:

Enclosed is the information related to hazardous wastes management at the Puerto Rico Sun Oil Company (PRSOC). This information is being submitted to local authorities accepting to participate in the PRSOC familiarization program, as required by regulatory agencies and as stated in 40 CFR §265.37 and EQB's Regulation for the Control of the Hazardous and Non Hazardous Waste (RCHNHSW) Part I-810 G.

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If you have any question regarding the information included, contact our Environmental Engineer, Carlos R. Martínez at (787) 893-2424 ext. 2431.

Cordially,

John M. Shea

mdh

Enclosure

10/15/96
10:05 am

8.0 POST-INCIDENT REPORTING PROCEDURES

As soon as practicable but not later than 15 days after completion of the initial response to a release, fire or explosion of hazardous waste or hazardous waste constituents, the Incident Commander will file a post-incident report to the plant manager.

The Incident Commander will verify that the facility manager notes in the operating record the time, date and details of any incident that required implementing the facility's Contingency Plan. Within 15 days after the incident, the Incident Commander or his designee will submit a written report to the EPA Regional Administrator and EQB detailing the following information:

- The name, address, telephone number of the owner or operator;
- The name, address, and telephone number of the facility;
- The date, time and type of incident (e.g. fire, explosion);
- The name and quantities of materials involved;
- The extent of injuries, if any;
- An assessment of actual or potential hazards to human health or the environment, where this is applicable, including the following:
  - likely route of migration of the release;
  - characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);
  - results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 15 days, they should be submitted to the Regional Administrator as soon as they become available.
  - Proximity to downgradient drinking water, surface water, and populated areas;
  - description of response actions taken or planned; and
- An estimate of the quantity of material recovered as a result of the incident, and its disposition.

Attachment A

TABLE OF CONTENTS

APPENDIX	TITLE
1	Glossary
2	Letters of Agreement
3	Corporate Emergency Plan
4	Emergency Plan Implementing Procedure List

PREFACE

SHELL CHEMICAL YABUCOA INCORPORATED (SCYI) produces and distributes petroleum distillate products. The Refinery is located approximately two miles east of the municipality of Yabucoa, at State Road 901, kilometer 2.8, Camino Nuevo, Yabucoa, Puerto Rico.

The REFINERY occupies 252 acres of land in the eastern most region of the municipality as shown in FIGURE i. FIGURE ii shows the locations of key response facilities, process areas, marine facilities, and maintenance buildings.

The EMERGENCY PLAN applies to the REFINERY, TANK FARM, MARINE AREA, and surrounding areas as specified by the EMERGENCY PLAN as EMERGENCY PLANNING ZONES.

This plan is designed to stand on its own. A CORPORATE EMERGENCY PLAN is provided in Appendix 3 which defines expanded resources available within SHELL CHEMICAL. The EMERGENCY PLAN is not designated to be a prescriptive document as each emergency incident is a unique event. The PLAN is designed to incorporate flexible emergency response which addresses the needs of the emergency.

The PLAN is supported by a set of EMERGENCY IMPLEMENTING PROCEDURES (EIP) which are listed in Appendix 4.

The Refinery Manager is responsible for assuring that the Refinery is prepared to respond to an emergency.

The **HEALTH, ENVIRONMENTAL AND SAFETY MANAGER** is responsible for development, maintenance, distribution, training for ERO personnel and administration of the EMERGENCY RESPONSE PLAN.

The PLAN is intended to meet the requirements of 29 CFR 1910.120(1) Emergency Response Section and the Superfund Amendment and Reauthorization Act of 1986, Title III issued under the authority of SARA section 126(e), 1986.

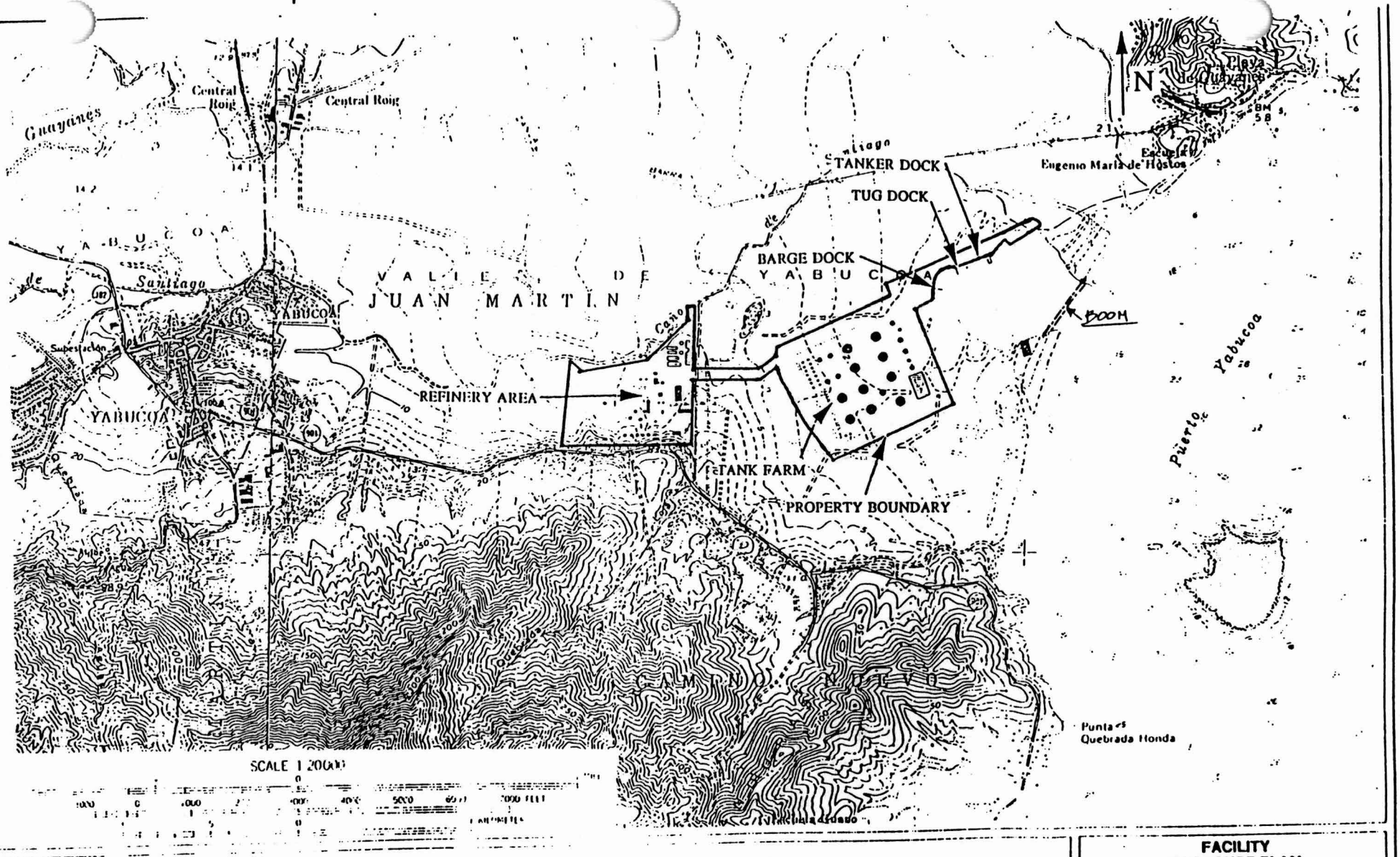


Figure 1 SITE LOCATION MAP

Yabucoa, Puerto Rico

FACILITY RESPONSE PLAN

SHELL CHEMICAL YABUCOA INC.

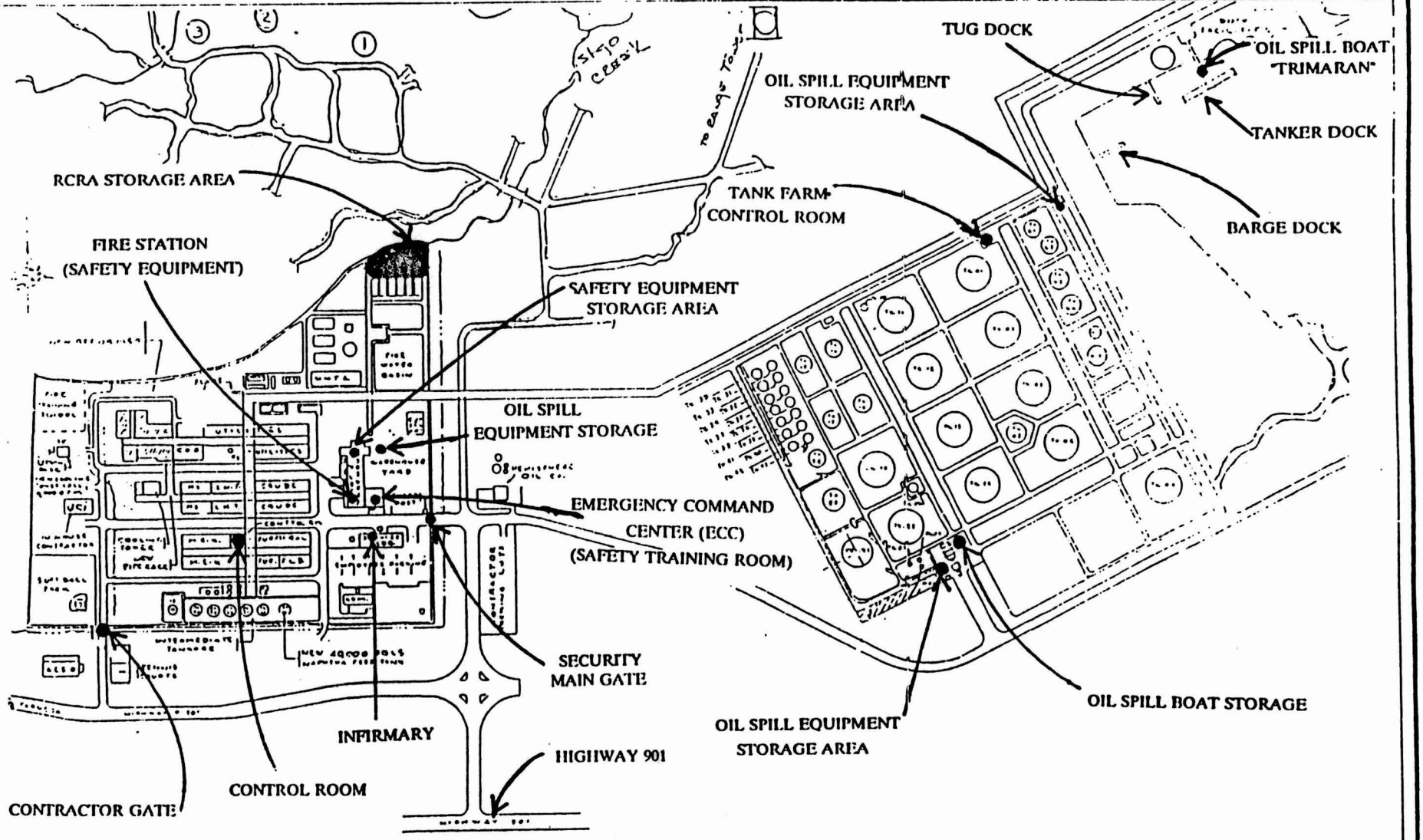


Figure 2 REFINERY LAYOUT MAP

Yabucoa, Puerto Rico

FACILITY RESPONSE PLAN

SHELL CHEMICAL YABUCOA INC.

A. ASSIGNMENT OF RESPONSIBILITIES

This section of the PLAN describes the responsibilities of the organizations which may respond to an emergency at the Yabucoa Refinery. FIGURE A-1 illustrates the formal relationship between emergency response organizations.

A.1 SHELL CHEMICAL YABUCOA INC.

SHELL CHEMICAL YABUCOA INC. is responsible for developing and maintaining an effective EMERGENCY RESPONSE PROGRAM by maintaining the PLAN and PROCEDURES, training personnel, procurement of adequate response equipment, and the development of response relationships with governmental agencies and private organizations which support the PLAN. The following are responsibilities of the SHELL CHEMICAL YABUCOA INC:

1. Recognize and declare an emergency condition;

2. Assess and classify an emergency event in accordance with the methodology described in Section D of the PLAN;

3. Notify appropriate REFINERY personnel, offsite organizations, and regulatory authorities of an emergency condition.

4. Take appropriate corrective action to mitigate the emergency.

5. Establish and maintain effective communications within the refinery and with off-site response organizations.

6. Continuously asses the status of the emergency situation and communicate that information to appropriate response organizations.

7. Continuously assess and implement protective actions for Sun employees and Sun property on-site, provide PROTECTIVE ACTION RECOMMENDATIONS (PAR) to off-site authorities to protect the public, their property and off-site response personnel.

8. Provide timely and accurate information to the Public and the Media in conjunction with off-site agencies.

9. Provide REFINERY personnel and their families with timely and accurate information about the emergency.

10. Notify appropriate REFINERY personnel and off-site organizations of emergency event termination.

SHELL CHEMICAL YABUCOA INC. emergency response is under the direction of the **ON-SCENE COMMANDER (OSC), or the INCIDENT COMMANDER (IC)**, as the Overall Response Manager, depending on the event classification level and EMERGENCY RESPONSE ORGANIZATION (ERO) activation. The YABUCOA REFINERY, MARINE TRANSFER AREA support response activities are described in Section B of the Plan.

A.2 MUNICIPALITY OF YABUCOA

The Yabucoa Police Department, Fire Department, Office of the Mayor, and Civil Defense Office are members of the Local Emergency Planning Committee (LEPC) and are available to support emergency response.

A.3 HUMACAO DISTRICT

The Humacao District Police, District Fire, District Hospital and Civil Defense resources are members of the LEPC and are available to support emergency response.

A.4 COMMONWEALTH OF PUERTO RICO

The Commonwealth of Puerto Rico Civil Defense, Environmental Quality Board (EQB), and resources available to the Office of the Governor are available for emergency response.

A.5 LOCAL EMERGENCY PLANNING COMMITTEE (LEPC)

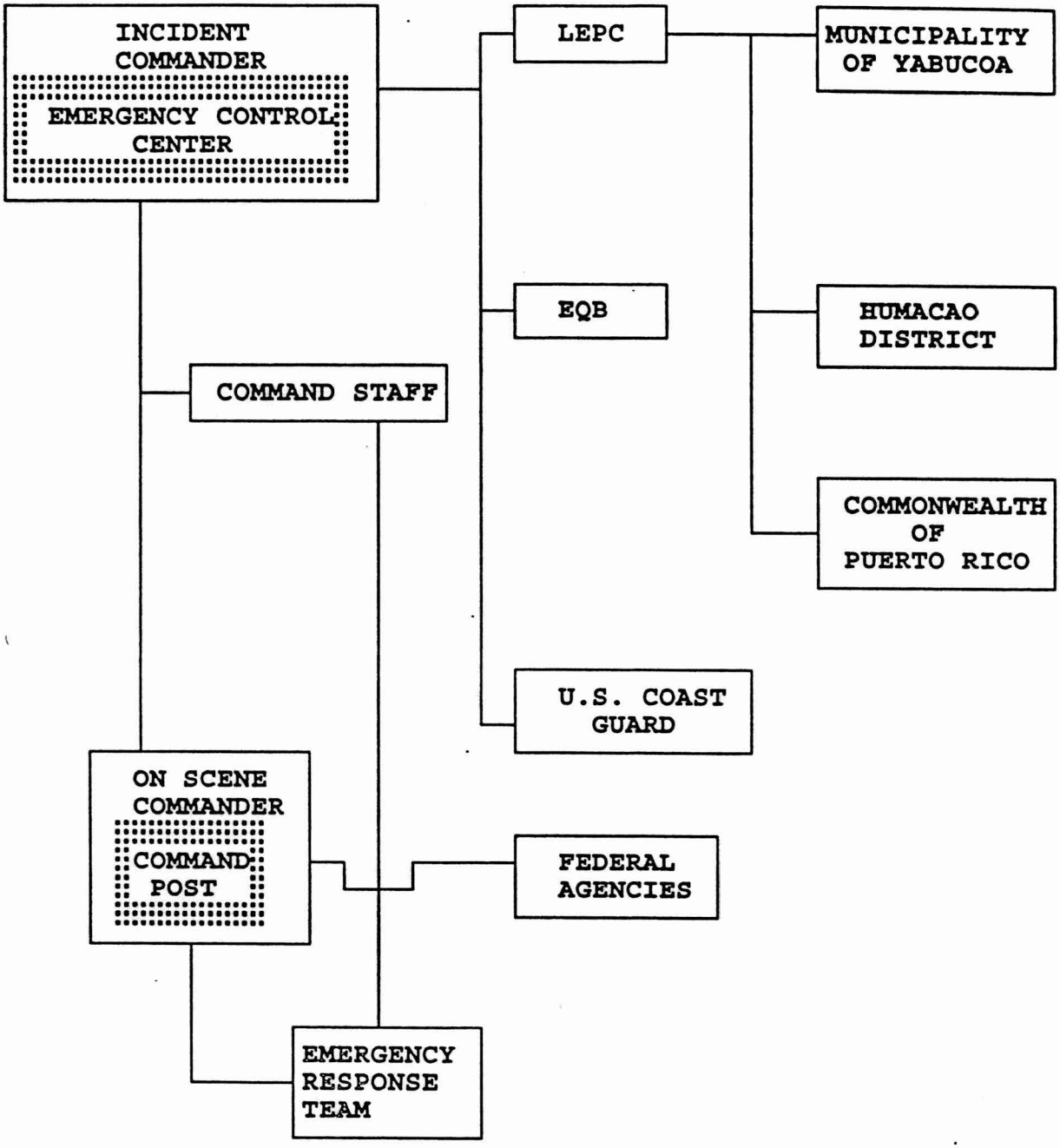
The LEPC Plan provides for emergency response in the following areas: medical, hospital, hazmat, fire, transportation, spill, and communications coordination with the refinery.

A.6 FEDERAL

The Environmental Protection Agency (EPA), The National Response Center (NRC) and The U.S. Coast Guard (USCG) are the Cognizant Agencies which respond and regulate emergency response to an emergency at SHELL CHEMICAL YABUCOA INC. (SCYI).

FIGURE A-1

EMERGENCY RESPONSE INTERACTIONS



B. REFINERY EMERGENCY ORGANIZATION

Initial response to a Refinery emergency will be provided from personnel on-shift at the Refinery. If the situation escalates, the **INITIAL RESPONSE TEAM** (IRT) designated for each shift will respond. This staff can be augmented substantially by additional Refinery personnel designated in the **EMERGENCY RESPONSE BRIGADE** (ERB), non-ERB qualified personnel, contract personnel and by personnel from offsite response organizations. This section of the PLAN includes a description of the emergency duties of the normal(day) shift complement, off-normal shift response organization, a discussion of the manner in which emergency assignments are to be made, a response resource list, and a description of the relationships between Refinery, contract, and offsite response activities.

REFINERY ORGANIZATION

The Refinery has 2 operating unit AREAS with each AREA having designated operating crews. The normal on-shift crew for each AREA includes a Unit Foreman, one or more Unit Operating Technicians, and one or more Process Operators. In addition, there is an Emergency Response Shift Supervisor and security personnel on-shift continuously. During the day shift (Monday-Friday), the EMERGENCY RESPONSE BRIGADE (ERB), is available to respond. Within each after hours shift an INITIAL RESPONSE TEAM (IRT) of a Captain and 4 response personnel are designated. The ERB is available by pager, 24 hours per day, to respond to Refinery emergencies. ON-CALL MANAGERS are also available by pager or beeper 24 hours per day. During the day shift (Monday through Friday), additional Refinery personnel are also available to support the initial response. For the evenings, nights, weekends and scheduled holidays, these personnel would be available by call-in.

EMERGENCY ORGANIZATION

The **AFFECTED AREA SHIFT SUPERVISOR** has the initial responsibility to classify an event in accordance with the emergency classification system (described in Section D). Classification of an event into one of the three emergency categories (UNUSUAL EVENT, SITE EMERGENCY AND GENERAL EMERGENCY) determines the EMERGENCY RESPONSE ORGANIZATION (ERO) notification and activation level.

For a **MINOR-UNUSUAL EVENT**, the **ON-SCENE COMMANDER/INCIDENT COMMANDER** (Affected Area Shift Supervisor) is responsible for implementing appropriate notifications and directing the proper response. The response organization for this classification is shown on Figure B-1.

For a **MAJOR-SITE EMERGENCY**, the EMERGENCY RESPONSE ORGANIZATION (ERO) may or may not be fully activated based upon the decision of the ON-SCENE COMMANDER/INCIDENT COMMANDER. Full activation of the ERO is shown on Figure B-2.

For a **MAJOR-GENERAL EMERGENCY**, the ERO will be fully activated as shown in Figure B-2; the Corporate emergency organization will be notified and activated as requested. Further information about the Corporate resources and operations is presented in the Corporate Emergency Plan, Appendix 3.

Relationships among the Refinery EMERGENCY RESPONSE ORGANIZATION (ERO) and other emergency response organizations are shown on Figure A-1.

EMERGENCY ORGANIZATION RESPONSIBILITIES

Following an emergency declaration, the positions shown on Table B-1 will be filled by Refinery personnel as discussed below.

1. **ON-SCENE COMMANDER (OSC)**

   - Primary : Production Manager
   - Alternates: Lubes Superintendent;
     Fuels Superintendent

   The On-Scene Commander has the authority for directing the at scene response in an emergency situation.

   The On-Scene Commander is responsible for insuring that the impact on personnel and business operation is minimized.

   The On-Scene Commander manages the following activities until arrival of the Incident Commander at the Emergency Control Center (ECC):

   a. Notification and communication: directs the notification of Refinery personnel and notifies and assures that open communications with offsite authorities
   regarding emergency response are maintained.

   b. Emergency response facilities: oversees the activation and staffing of the Command Post (CP) and requests additional assistance as needed, including the decision to activate the ERO.

   c. Emergency operations: authorizes emergency response activities taken to alleviate the emergency condition or reduce the threat to the safety of Refinery personnel or the public, including the recommendation of protective actions to offsite authorities.

   d. Emergency services: provides overall direction for procurement of Refinery needed materials, equipment, and supplies; documentation; accountability; and security functions.

   Until the ECC is fully activated the On-Scene Commander has the sole responsibility and may not delegate the following:

   a. Declarations of Emergency Classifications

   b. The decision to notify offsite authorities or request assistance from offsite response organizations.

   c. The decision to recommend protective actions to offsite authorities.

d. The decision to downgrade an emergency classification or terminate the emergency.

e. The decision to order evacuation of non-essential personnel from the Refinery.

Upon activation of the ECC, and arrival of the INCIDENT COMMANDER the ON-SCENE COMMANDER will turn over the responsibility for the following:

a. Notification of offsite authorities

b. Event classification;

c. Protective Action Recommendation development and notification; and will focus on the response scene and the emergency operation of the affected unit and its effect on other refinery operations.

The On-Scene Commander will continue to authorize emergency response actions taken at the scene, make recommendations to the Incident Commander and assure that communications to the ECC are adequate.

2. **INITIAL RESPONSE TEAM (IRT)**

a. The IRT performs the following **INITIAL** activities under the direction of the IRT Captain until arrival of the On-Scene Commander at the scene:

- Assemble at the fire station;
- Report to the emergency scene with designated emergency response vehicles;
- Set up appropriate response equipment under the direction of the IRT Captain;
- Take emergency response action to alleviate the emergency condition or reduce the threat to the safety of personnel, the Refinery, and the public;
- Request additional assistance if emergency exceeds IRT response capabilities (ie: entry, boat operation, equipment operation);

b. Upon activation of the Emergency Response Brigade the IRT Captain will provide an adequate briefing of emergency equipment set up and initial response in progress and provide emergency response support as requested.

3. EMERGENCY RESPONSE BRIGADE (ERB)

Upon activation, the EMERGENCY RESPONSE BRIGADE (ERB) will assemble at the fire station under the direction of the ERB CAPTAIN. The ERB Captain under the direction of the On-Scene Commander will be responsible for the following response actions:

a. EMERGENCY RESPONSE BRIGADE CAPTAIN

- Primary : Qualified On-Shift Captain
- Alternate: All qualified Brigade Captains

Authorize emergency response actions taken to alleviate events at the scene of the emergency.

Continuously keep the On-Scene Commander informed of the conditions and actions at the scene of the emergency.

Recommend protective actions to the On-Scene Commander.

Recommend upgrade, downgrade emergency classification or terminate the emergency to the On-Scene Commander.

Reports to the scene, establishes communications with the Area Foreman, On-Scene Commander and establishes the Command Post under the direction of the On-Scene Commander.

Receives direction from the On-Scene Commander to dispatch Emergency Response Brigade Members to prescribed areas of the Refinery.

Ensures that all Refinery safety regulations are complied with at the scene.

b. EMERGENCY RESPONSE BRIGADE MEMBERS

- Primary : Qualified On-Shift members
- Alternate: All qualified Brigade members

The Emergency Response Brigade Members report to the Fire Station to assemble with their squad and await direction from the Emergency Response Brigade Captain.

c. **TACTICAL OFFICER (TAT OFF)**

- Primary : Emergency Response Supervisor
- Alternate: Emergency Response Shift Supervisor; ERB Captains

The Tactical Officer is responsible for the coordination and performance of tactical assignments.

The Tactical Officer has the following responsibilities:

* Report to the Command Post and Assume Directions and control of the ERB and relieve the ERB Captain of the duties in a above.
* Reviews conditions with subordinates and assigns tasks.
* Coordinates activities with outside resources.
* Submits situation and resource status information to Incident Commander.
* Provides Command Post with updates on activities at the incident scene.
* Makes arrangements and/or coordinates mutual aid.
* Facilitates/coordinates control efforts.
* Serves a liaison with local fire/police personnel.
* Provides technical support to outside fire/police and other mutual aid personnel assuring their safety.

d. **COMMAND POST COORDINATOR (CPC)**

- Primary : Qualified ERB Member
- Alternate: Environmental Technician;

The Command Post Coordinator has the following responsibilities:

* Report to the CP, deploy the CP, and ensure that all CP equipment and supplies are operational at the emergency scene.
* Provide the necessary communications equipment to support the On-Scene Commander.
* Ensure that the Command Post is to be located at a strategic point at or near the incident.

* Provides for a focal point for field command activities.

* The mobile Command Post is designed to meet all field radio and telephone communication reqs.

e. **SAFETY OFFICER (SAF OFF)**

- Primary : Health/Safety Specialist
- Alternates: Process Safety Manager, Environmental Specialist.

The Safety Officer is responsible for monitoring, sampling and assessing potential health hazards and hazardous and unsafe conditions and developing measures for assuring personnel safety.

The Safety Officer has the following responsibilities:

* Maintains communications link with the Emergency Control Center and Command Post.

* Monitors use of PPE by response personnel.

* Sets-up monitoring equipment and conducts testing to assess health hazards.

* Records and documents findings.

f. **ENVIRONMENTAL OFFICER (ENV OFF)**

- Primary : Environmental Consultant
- Alternates: Environmental Specialist; Environmental Specialist.

The Environmental Officer is responsible for monitoring the environmental impact of the incident and determining what type of compliance action needs to be undertaken.

The Environmental Officer has the following responsibilities:

* Assesses the incident for environment impact.

* Recommends a course of action to the incident commander to reduce the environmental impact.

* Contacts Local, State and Federal Officials.

* Provides Liaison between the Incident Commander and Local, State and Federal Regulatory Agencies.

* Provides environmental impact information to the recording officer for documentation.

4. EMERGENCY CONTROL CENTER (ECC)

a. INCIDENT COMMANDER (IC)

- Primary : Refinery Manager
- Alternates: Production Manager; HES Manager; Technical Manager

The Incident Commander is responsible for all incident response activities including the development and implementation of strategic plans and for approving the ordering and releasing of resources.

The Incident Commander has the following responsibilities:

* Command and direction of departments or groups in the organization.
* Authorizes all communication prior to release to the news media.
* Assumes responsibilities initially managed by the On-Scene Commander: See Section B.1.
* Assesses the incident situation.
* Activates elements of the Incident Command System.
* Approves and authorizes implementation of the Incident Action Plan.
* Coordinates Incident Command staff activity.
* Manages incident operations.

b. MAINTENANCE OFFICER (MAINT OFF)

- Primary : Fuels Superintendent
- Alternates: E/I Superintendent, Maintenance Support Superintendat, Contractor Administrator

The Maintenance Officer has the following responsibilities:

* Liaison between the Maintenance Department and the Incident Commander.
* Directs maintenance activities.
* Supports the Incident Commander

c. **TECHNICAL OFFICER (TECH OFF)**

- Primary : Technical Manager
- Alternates: Process Superintendent, Project Superintendent

The Technical Officer has the following responsibilities:

* Liaison between the Technical Department and the Incident Commander.
* Directs process and engineering related investigation activities.
* Supports the Incident Commander

d. **LOGISTICS OFFICER (LOG OFF)**

- Primary : Materials Manager
- Alternates: Contracts Manager; Buyer

The Logistics Officer is responsible for providing facilities, services, material and ordinary equipment and supplies in support of the incident.

The Logistics Officer has the following responsibilities:

* Liaison between the Materials Management Department and the Incident Commander.
* Directs materials purchasing, warehouse and contracts activities.
* Supports the Incident Commander.
* Provides services and support requirements for planned or expected operations.
* Orders, receives, distributes, and stores supplies and equipment.
* Maintains an inventory of supplies and equipment.

e. **PLANNING OFFICER (PLN OFF)**

- Primary : HES Manager
- Alternates: Process Safety Manager; Emergency Response Supervisor.

The Planning Officer is responsible for the collection, evaluation, dissemination and use of information about the incident and status of resources.

The Planning Officer has the following responsibilities:

* Liaison between the HES Department and the Incident Commander.

* Coordinates fire protection, safety, security, environmental and emergency response activities.

* Supports the Incident Commander.

* Supports the LEPC Liaison and LEPC activities.

* Collects information necessary for use in preparing the Incident Action Plan.

* Collects information and develops alternative strategies.

* Prepares the Incident Action Plan.

* Identifies the need for specialized resources such as Marketing or Marine Department representatives and Public Relations Support.

f. **LIAISON OFFICER (LIA OFF)**

* Primary : Employee & Plant Services Manager

* Alternates: Employee Relations Manager; Human Resources Analyst

The Liaison Officer is responsible for providing coordination and appropriate management of all resources.

The Liaison Officer has the following responsibilities:

* Liaison between the Human Resources Department and the Incident Commander.

* Directs employee family related services including rumor control, legal/insurance issues, public evacuation liabilities and provides food and temporary housing for the emergency response organization, as needed.

* Maintain accountability for all Refinery personnel, including those required to evacuate the Refinery.

* Supports the Incident Commander.

* Responds to requests from Incident Command personnel for organizational contacts.

* Provides a point of liaison between the incident site, corporate headquarters and other Shell locations.

g. **FINANCE OFFICER (FIN OFF)**

- Primary : Finance Director
- Alternates: Controller; Inv. & Accounts Payable Supervisor.

The Finance Officer is responsible for all financial and cost analysis aspects of the incident.

The Finance Officer has the following responsibilities:

* Liaison between the Financial Department and the Incident Commander.

* Directs financial activities.

* Supports the Incident Commander.

* Activates Finance Office for support services and personnel.

* Develops an Operating Plan for the finance portion of the incident.

* Provides input on financial and cost analysis matters.

* Insures that all obligation documents initiated at the incident are properly prepared and completed.

h. **SECURITY OFFICER**

- Primary : Emergency Response Shift Supervisor On-Shift
- Secondary : Next Shift ERSS; Day Shift ERSS

The Security Officer is responsible for all security at the emergency sites.

The Security Officer has the following responsibilities:

* Establish access control to scene for company employees, contractors, press, regulators and law enforcement and fire personnel.

* Works with Incident Commander in recommending actions to protect the public.

* Provides necessary liaison with local public safety authorities.

* Provides physical security for all assets both physical and human, (i.e. fencing, alarms, guards, I.D. Bages).

* Provides field communications, (i.e. portable radios, cellular phones, satellite, pagers).

i. **AFFECTED AREA ADVISOR**

- Primary : Plant Coordinator
- Alternates: Affected Area Process Engineer;

The Affected Area Advisor has the following responsibilities:

* Liaison between the Affected Area, Main Control Room and the On-Scene Commander.

* Provides guidance for Affected Area employees concerning operational and adjustments for safe operation of the affected unit.

* Supports the Incident Commander.

j. **EMERGENCY CONTROL CENTER COORDINATOR**

- Primary : Process Safety Manager.
- Alternate : Emergency Response Shift Supv.

The Emergency Control Center Coordinator has the following responsibilities:

* Direct activation of the ECC.

* Ensure that all ECC personnel have signed in to establish initial accountability.

* Maintain telephone communications and obtain repair services should service be lost.

* Direct clerical duties including copying, record keeping, etc. and ECC activation activities.

* Direct activities relating to documentation of the various actions taken by the Incident Commander and ECC personnel during the emergency.

* Restore all equipment to its pre-emergency condition, following deactivation of the ECC.

k. **INFORMATION OFFICER**

- Primary : Empl. & Comm. Rel. Specialist
- Alternates: Human Resources Analyst; Training Coordinator

The Information Officer is responsible for the formulation and release of information about the incident to the news media and other appropriate external agencies and organizations.

The Information Officer has the following responsibilities:

* Establish an Incident Information Center (offsite).
* Prepares an initial information summary as soon as possible.
* Obtains approval for release of information from the Incident Commander.
* Releases news to the news media and posts information in the Emergency Control Center.

h. **RECORDING OFFICER**

- Primary : HES Manager Secretary
- Alternates: Materials Coordinator; Technical Manager Secretary.

The Recording Officer is responsible for maintaining accurate and complete incident files.

The Recording Officer has the following responsibilities:

* Tracks the status of all requests (maintains activity log).
* Provides a summary, including event chronology, for future management planning.
* Develops a written incident critique.

5. REFINERY MEDICAL RESPONSE

a. MEDICAL OFFICER (MED OFF)

- Primary : Refinery Doctor
- Alternate: Industrial Nurse: Yabucoa Hospital

The medical services personnel are responsible for the treatment and care of employees and emergency responders for the duration of the incident.

The Refinery Physician has the following responsibilities:

* Liaison between the Refinery Medical Facility and the Incident Commander.
* Directs medical emergency activities.
* Serves as primary interface with the offsite medical facilities and personnel.
* Supports the Incident Commander.
* Establishes emergency Triage Area.
* Based upon information received from Command Post the medical services personnel will make appropriate decisions for emergency medical treatment.
* Maintains contact with local hospitals on status of injured personnel.

b. EMERGENCY MEDICAL ASSISTANT

- Primary : Industrial Nurse
- Alternates: Emergency Response Shift Supervisor; Lab Technicians; Contract Nurse.

The Emergency Medical Assistant has the following responsibilities:

* Directs Refinery Medical Facility activities.
* Supports the Refinery physician.

The Refinery Physician and Nurse will be located at the Refinery Medical Facility although they may respond to scene for search and rescue if needed.

6. **EMERGENCY NEWS CENTER**

a. **COMPANY SPOKESPERSON**

- Primary : Refinery Manager
- Alternates: HES Manager; Production Manager.

The Company Spokesperson has the following responsibilities:

* Represent Shell Chemical Yabucoa Inc. to the News Media, public, and other companies.
* Assess and provides feedback on public relations activities to the Incident Commander and ECC.

7. **LEPC OPERATIONS CENTER AREA**

a. **LEPC LIAISON**

- Primary : Environmental Specialist.
- Alternates: Environmental Consultant; HES Manager.

The LEPC Liaison has the following responsibilities:

* Liaison between the Local Emergency Planning Committee and the Incident Commander.
* Provide technical information to the Local Emergency Planning Committee and keep the Planning Officer informed of Local Emergency Planning Committee activities.
* Assess and provide information with LEPC organization members.
* Coordinate and communicate all decisions made by the LEPC that will affect response operations.
* Coordinate activities with the Different offsite organizations and provide available communication resources to them.

EMERGENCY ORGANIZATION ASSIGNMENTS

Table B-1 identifies by title the individuals who will fill key emergency positions. A sufficient number of people are identified in EIP-001, to ensure that all emergency positions can be filled in an emergency.

OTHER SUPPORT SERVICES

1. CONTRACTOR SUPPORT

Arrangements will be made to obtain support services from a list of frequently used contractors, as needed. These contractors may initially be contacted by the Logistics Officer to arrange for the required assistance.

2. MEDICAL ASSISTANCE

Agreements are in place with local medical facilities and Emergency Medical Services Assistance to provide assistance for injured personnel. This assistance will be requested whenever necessary in accordance with Refinery procedures.

INTERFACES AMONG RESPONSE GROUPS

Section A, Figure A-1, illustrates the integrated organization for response to an emergency.

TABLE B-1

EMERGENCY ORGANIZATION ASSIGNMENTS
NORMAL POSITION BY TITLE

Emergency Position	Primary	Alternate(s)
Incident Commander+++	**Refinery Manager**	Production Mgr.; HES Mgr.; Tech. Mgr.
****************************FIELD COMMAND POST (FCP)****************************		
On-Scene Commander	**Production Manager**	Lubes Supt.; Fuels Supt.
Tactical Officer	Emerg. Resp. Supv.	ERSS
Emergency Response Brigade	Qualified On-shift	All Qualified Brigade Members
Safety Officer	H/S Specialist	Process Safety Manager Environmental Specialist
Environmental Officer	Environmental Cons.	Environmental Spec., Environmental Spec.
Security Officer	ERSS on Shift	Next Shift ERSS, Day Shift ERSS
ommand Post	Env. Technician	Qualified ERB Member
**************************EMERGENCY CONTROL CENTER (ECC)**************************		
Planning Officer+++	HES Manager	Process Safety Manager Emergency Response Supervisor.
Maintenance Officer	Fuels Superintendent	E/I Superintendant: Maint. Support Supt.; Contractor Administrator
Logistics Officer	Materials Manager	Materials On-Call
Finance Officer	Financial Director	Controller; Inv & Accounts Payable Supv.
Liaison Officer	E & PS Manager	H.R. Analyst; H.R. Analyst
Emergency Control Center Coord.	Process Safety Mgr.	ERSS
Recording Officer	HES Mgr. Secretary	Materials Coordinator; Tech. Mgr. Secretary

Emergency Position	Primary	Alternate(s)
******************************REFINERY DISPENSARY******************************		
Medical Officer	Refinery Doctor	Ind. Nurse, Yabucoa CDT
Medical Support Advisor	Industrial Nurse	ERSS, Lab. Tech. Contract Doctor
Medical Assistant (Trans. & Rescue)	ERSS	Lab Tech., Contract Nurse
Emergency Medical Vehicle Operator	Lab Technician	Lab Technician, ERSS
*************************EMERGENCY NEWS CENTER (ENC)*************************		
Information Officer+++	H.R. Analyst	H.R. Analyst; Training Coordinator
Company Spokesperson	Refinery Manager	HES Mgr.; Production Manager
**********************************(LEPC CENTER)**********************************		
LEPC Liaison	Env. Specialtist	Environmental Cons, HES Mgr.

****

+++: MAY OPERATE OR MOVE BETWEEN REFINERY LOCATIONS

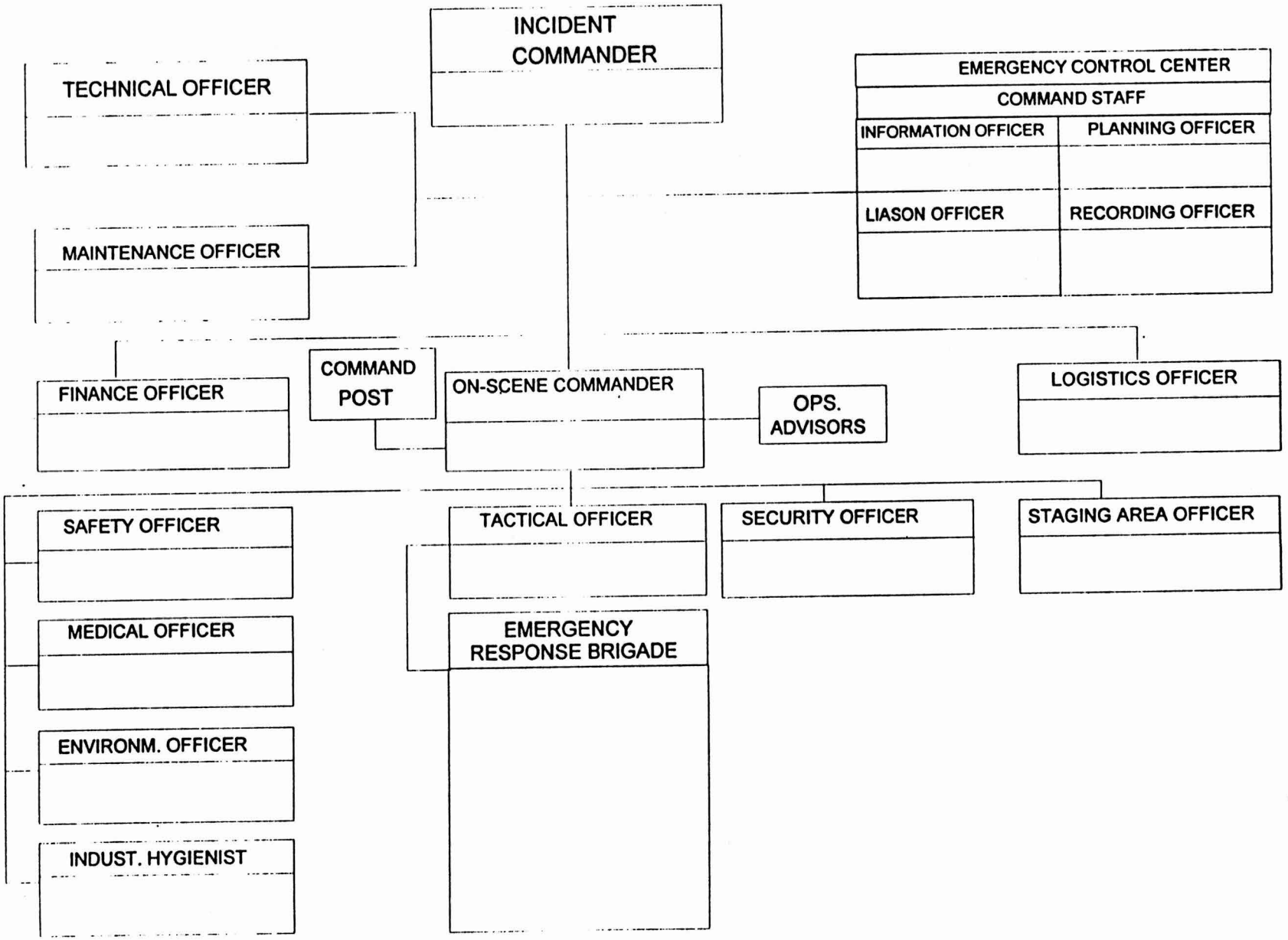
TABLE B-2

ERO RESPONSE MATRIX

TITLE	UNUSUAL EVENT	SITE EMERGENCY	GENERAL EMERGENCY
	1 2 3 4 5 6 7	1 2 3 4 5 6 7	1 2 3 4 5 6 7
MN GATE	R R R R R R R	R R R R R R R	R R R R R R R
SHFT-SUP	R R R R R R R	R R R R R R R	R R R R R R R
SEC. OFF	R R R R R R R	R R R R R R R	R R R R R R R
OSC	N N N R N N N	R R R R R R S	R R R R R R R
IC	N N N S N N N	R R S R S R S	R R S R S R R
PLN. OFF	N N N R N N N	R R S R S R R	R R R R S R R
ERB	- - - - - - -	R - - - - R -	3R R - R - R -
TAT. OFF	N S - S N S N	R R R R S R R	R R R R R R R
MED. OFF	- - - - - N -	R - - S - R -	R - - R S R S
MEDRESPVH	S - - - - R -	R - - - - R -	R - - - S R R
CP	- R - S - - -	R R S R S R S	R R R R R R R
ECC	- - - R - - -	R R - R S R S	R R R R R R R
MAINT. OFF	- R R S N - S	R R R R R S R	R R R R R R R
SEC. OFF	- R - R - R -	R R R R R R R	R R R R R R R
ENV. OFF	- R R N R - -	R R R S R - N	R R R S R S S
LOG. OFF	- S - S - - -	R R S R - - S	R R R R R S S
REC. OFF	- R - - - - -	R R - R S R S	R R S R S R S
FIN. OFF	- R - - - - -	R R N S S - -	R R S S S S S
LIA. OFF	- - - - - - -	R S - S S R -	R R S R R R S
SAF. OFF	- - - - - - -	R R S R - R -	R R R R - R -
ENC			
INF. OFF	N S N N N N -	R R N R R R S	R R R R R R R
STG. OFF	- - - - - - N	S R - R - R S	R R R R R R R
IND HYG	- - - - - - -	R R S R R S -	R R S R R R -
ON CALL MGR	N N N N N N N	N N N N N N N	N N N N N N N

N - NOTIFICATION
S - STANDBY
R - RESPONSE

INCIDENT COMMAND ORGANIZATION



C. EMERGENCY RESPONSE SUPPORT AND RESOURCES

LOCAL GOVERNMENT SUPPORT

The ENVIRONMENTAL EMERGENCY RESPONSE PLAN establishes guidelines for actions to be taken in response to an environmental incident within the HUMACAO DISTRICT. The jurisdictions of the Plan within the HUMACAO district are the following: Aguas Buenas, Ceiba, Humacao, Las Piedras, San Lorenzo, Caguas, Gurabo, Juncos, Naguabo, and Yabucoa. The CIVIL DEFENSE OF PUERTO RICO Law #22, Executive Order 4784-B, SARA Title III, and Executive Order #4916-A legally govern the emergency response plan. Notification procedures, emergency facilities, equipment, management, communications, emergency equipment, hazardous materials handling and disposition as well as administrative programs are included in this plan.

YABUCOA

CIVIL DEFENSE (CD)

Upon receipt of notification of an incident Yabucoa CD will notify Humacao CD. The Yabucoa CD Director will report to the Incident scene to support the Incident Commander at the response scene. Yabucoa CD will provide communications support, activate resources, implement evacuation plans if necessary, coordinate response activities with Emergency Services and activate the Yabucoa Emergency Operations Center (EOC) if necessary, in coordination with the affected facility.

DISTRICT POLICE DEPARTMENT

The police department will establish a security perimeter to ensure affected area control, implement public evacuation recommendations, protect the safety, property, maintain law and order, provide communications assistance, and if necessary assist in establishing a temporary morgue.

DISTRICT FIRE DEPARTMENT

The fire department will respond in the event of a fire or rescue operation as requested. They will assist the EQB during offsite cleanup operations as required.

HUMACAO DISTRICT SUPPORT

The Humacao District will provide the 24 hour warning point for emergency notification and will provide communications support in the notification of local agencies and coordination of LEPC resources.

COMMONWEALTH OF PUERTO RICO SUPPORT

CIVIL DEFENSE

If assistance is needed beyond municipality or district capabilities, Civil Defense will coordinate requests. If more assistance is needed beyond the Commonwealth of Puerto Rico, the Civil Defense will coordinate requests to the Federal Emergency Management Agency (FEMA).

ENVIRONMENTAL QUALITY BOARD (EQB)

The EQB will provide technical response assistance, if necessary coordinate emergency response, establish response criteria for handling, decontamination, and disposition of hazardous materials within the affected area. The EQB will also coordinate with EPA and other cognizant federal agencies.

DEPARTMENT OF HEALTH

The Department of Health will provide technical assistance, medical assistance in establishing a medical response area, ambulance service, and assessment of environmental health risk. Assist in the determination of proper decontamination procedures for personnel and equipment.

OTHER SUPPORT

Each emergency will be treated individually and response will be determined beyond these basic guidelines for department response. In addition to the agencies listed above, the following may be activated as necessary: GENERAL SERVICES ADMINISTRATION, DEPARTMENT OF PUBLIC WORKS, ELECTRIC ENERGY AUTHORITY, WATER RESOURCES AUTHORITY, NATURAL RESOURCES DEPARTMENT, PUERTO RICO TELEPHONE COMPANY, AND THE AMERICAN RED CROSS.

FEDERAL AGENCY SUPPORT

The Commonwealth of Puerto Rico Civil Defense will request assistance from the Federal Emergency Management Agency (FEMA) for a Presidential Disaster declaration to allow supplemental federal financial and technical assistance to be provided.

ON-SITE MAINTENANCE CONTRACTOR

The on-site maintenance contractor is a portion of the oil spill response, and if necessary can be utilized during cleanup and recovery operations. Personnel responding from the resident contractor receive training required for response personnel.

D. EMERGENCY CLASSIFICATION SYSTEM

SUMMARY OF EMERGENCY CLASSIFICATION LOGIC

The classification system for the Refinery Emergency Response Plan is based on two emergency incident classes, which are **MINOR** and **MAJOR**. These are further broken down into three emergency classification schemes. They are **MINOR-UNUSUAL EVENT** for a Minor incident, **MAJOR-SITE EMERGENCY** which may have a major effect on Refinery operations or have the potential for escalation and **MAJOR-GENERAL EMERGENCY** which may have the potential to affect the offsite population.

The classes determine the initial steps to be taken by SCYI-Yabucoa Refinery emergency response organization and the actions which are taken by the offsite support organizations. An emergency class is an indicator of the status of the condition at the Refinery. Inputs to the emergency classification system include the status of the Unit systems, hazardous materials in the Refinery, fires, natural phenomenon, medical emergencies, and other hazards affecting both Refinery personnel and the public.

The emergency classes may also be used by offsite authorities to determine what level of response is required to be taken by their respective emergency organizations. Protective actions taken on behalf of members of the public are the responsibility of Yabucoa Municipal government. Protective actions taken by the government are based on projected or potential hazardous exposures to the public. The projected or potential exposures are based on considerations such as source of chemical spill, chemicals released, emission rate, concentration, molecular weight, stability class, and actual meteorological conditions.

EMERGENCY CLASSIFICATION DESCRIPTION AND RESPONSE

The emergency classification levels are as follows :

A **MINOR - UNUSUAL EVENT** is normally an emergency capable of being managed solely by the affacted area Shift Supervisor, and the Emergency Response Shift Supervisor. This class also could give early notification of events that could lead to more serious consequences or might indicate more serious conditions which have not yet fully developed.

This class also represents potential public concerns brought to the attention of the offsite authorities. THE MINOR - UNUSUAL EVENT also designates events which require notification of appropriate personnel to assure regulatory reporting requirements are addressed.

A **MAJOR - SITE EMERGENCY** reflects conditions where some significant hazardous conditions are likely or are occurring, but do not necessarily have a direct impact on the public. In this situation, offsite emergency response personnel may or may not be

fully activated.

A **MAJOR - GENERAL EMERGENCY** involves an actual or imminent hazardous condition which has a direct impact on the public and/or requires assistance. The immediate action for this class is to recommend sheltering until an assessment can be made.

Emergency class descriptions are provided below. Also included are the actions to be carried out by Yabucoa Refinery emergency response personnel for each emergency class.

MINOR - UNUSUAL EVENT

1. **CLASS DESCRIPTION**

   Unusual events are in progress or have occurred which indicate a potential degradation of the level of safety, health or the environment of the refinery or public concerns brought to the attention of the offsite authorities. No hazardous conditions or releases of hazardous material requiring offsite response or monitoring are expected unless further degradation of safety, health and environments occurs.

2. **YABUCOA REFINERY ACTIONS**

   a. Assess and respond.

   b. Immediately notify HUMACAO DISTRICT CIVIL DEFENSE of the UNUSUAL EVENT, if applicable.

   c. Augment emergency response resources by activating Field Command Post, as needed.

   d. Escalate to a more severe class, if appropriate, or close out with a verbal summary to the Yabucoa Police Department.

MAJOR - SITE EMERGENCY

1. **CLASS DESCRIPTION**

   Events are in progress or have occurred which involve actual or likely major failures of Refinery functions needed for protection of the public and Refinery personnel. Any hazardous material releases are not expected to exceed EPA reportable quantities, except on site.

2. **YABUCOA REFINERY ACTIONS**

   a. Assess and respond.

   b. Immediately inform the HUMACAO DISTRICT CIVIL DEFENSE of Site Emergency and reasons for emergency.

c. Activate appropriate ERO, the Command Post, Emergency Control Center, and Emergency News Center, as needed.

d. Dedicate an individual for emergency status updates to offsite authorities and periodic press briefings (perhaps in conjunction with offsite authorities), if needed.

e. Have Liaison on site available for consultation with the Municipal and District officials on a periodic basis.

f. Provide exposure information to offsite authorities for actual hazardous material releases, and/or hazardous conditions.

g. Provide release and exposure projections based on available unit condition information and foreseeable contingencies.

h. Escalate to GENERAL EMERGENCY if appropriate, reduce emergency or class or close out and brief appropriate Refinery personnel, HUMACAO DISTRICT CIVIL DEFENSE, and local officials.

i. Plan Recovery and Re-entry

MAJOR - GENERAL EMERGENCY

1. **CLASS DESCRIPTION**

Events are in progress or have occurred which involve actual or imminent substantial safety, health, and environmental concerns. Hazardous materials releases can be reasonably expected to exceed EPA reportable quantities for the immediate site and offsite area.

2. **YABUCOA REFINERY ACTIONS**

a. Assess and respond.

b. Immediately inform the HUMACAO DISTRICT CIVIL DEFENSE of the General Emergency event category and event description.

c. Provide Protective Action Recommendations (PAR) to the Municipal authorities.

d. Activate the ERO Command Post, Emergency Control Center, and Emergency News Center.

e. Dedicate an individual to support the Company Spokesperson for plant status, updates to offsite

authorities, and periodic press briefings.

f. Provide for consultation with municipal authorities.

g. Provide exposure estimates to offsite authorities for actual hazardous material releases and/or hazardous conditions.

h. Provide release and exposure projections based on plant conditions and foreseeable contingencies.

i. Close out or reduce emergency class by briefing appropriate Refinery personnel, HUMACAO DISTRICT CIVIL DEFENSE, and offsite authorities.

CLASSIFICATION PROCESS

The various Refinery conditions that are grouped as MINOR-UNUSUAL EVENTS are listed in table D-1, for MAJOR-SITE EMERGENCY are listed in table D-2, and for MAJOR-GENERAL EMERGENCY are listed in table D-3.

A summary of Emergency Classifications is shown in Table D-4.

TABLE D-1

MINOR - UNUSUAL EVENT

INITIATING CONDITIONS

1. Loss of any one of the following utilities :

    a. Electricity
    b. Cooling Water
    c. Steam
    d. Fuel gas
    e. Instrument Air
    f. Dry gas

*2. Fire in Refinery <u>without</u> using major fire equipment and Emergency Response Brigade.

3. Natural phenomenon with projected unusual levels (e.g. hurricane, earthquake).

*4. Other hazards being experienced or projected.

    a. Unusual aircraft activity overhead.
    b. Transportation incident on site, no release.
    c. Near or on-site explosion.
    d. Flammable gas or liquid release with no ignition.
    e. Sustained or loud noises
    f. Transportation incident offsite requiring Refinery assistance.
    g. Minor oil spill requiring ERB activation.

*5. Fire-fighting operations that are hampered by unusual weather conditions (i.e. high winds or heavy rain)

6. Release of hazardous materials less than reportable quantity.

7. Abnormal environmental control conditions:

    a. Shutdown of pollution control equipment
    b. Unusual release of Refinery materials to the environment (air, land, water) such as upset, spill, equipment malfunction, pressure relief.

8. Unusual operations

    *a. Excessive smoking.
    b. Unusual flare.
    c. Non-hazardous odor beyond Refinery fence line.

9. Equipment failure adversely affecting Unit conditions which may escalate.

*Requires notification of Offsite Agency (NRC,EQB,EPA,LEPC,YPD,etc.)

TABLE D-2

MAJOR - SITE EMERGENCY

INITIATING CONDITIONS

1. Loss of a combination of the following utilities:

   a. Electricity
   b. Cooling water
   c. Steam
   d. Fuel gas
   e. Instrument air
   f. Dry Gas

*2. Fire in Refinery with rolling fire equipment.

3. Medical emergency involving multiple severe injuries and/or fatalities requiring offsite assistance.

*4. Natural phenomenon being experienced such as a storm hitting the Refinery or strong winds causing structural damage to Refinery or flooding.

*5. Other hazards being experienced or projected:

   a. Aircraft crash into a Refinery structure.

   b. Transportation incident on site releasing hazardous materials less than reportable quantity.

   c. Near or on-site explosion involving hazardous materials.

   d. Flammable gas or liquid release with ignition.

6. Security threat (i.e. bomb threat, civil disturbance, kidnapping, extortion, criminal act, labor/strike/violence, demonstration).

7. Fire-fighting operations that are delayed by extreme weather conditions (i.e. hurricane)

*8. Release of hazardous materials exceeding reportable quantity requiring offsite assistance.

*9. Release of noxious odors beyond Refinery fence line.

10. Equipment failure adversely affecting other Units with potential for escalation.

*Requires reporting to Offsite Agency (NRC,EQB,EPA,LEPC,YPD,etc.)

TABLE D-3

MAJOR - GENERAL EMERGENCY

INITIATING CONDITIONS

1. Complete loss of the following utilities:

    a. Electricity
    b. Cooling water
    c. Steam
    d. Fuel gas
    e. Instrument air
    f. Dry Gas

*2. Spill of flammable or potentially dangerous liquids outside the Refinery fence line (e.g. oil, hot asphalt).

*3. Fire in Refinery requiring offsite assistance.

*4. Other hazards being experienced or projected:

    a. Aircraft crash into one of the units.

    b. Transportation incident on site releasing hazardous materials greater than reportable quantities.

    c. Explosion within one of the units.

5. Fire-fighting operations prevented by extreme weather conditions (i.e. heavy wind/or rain storms).

*6. Release of hazardous materials exceeding reportable quantity leaving Refinery property.

7. Equipment failure - causing loss of environmental control, loss of plant control, or loss of fire or well water.

8. Hurricane conditions projected within 12 hours or hurricane conditions on site.

*Requires reporting to Offsite Agency (NRC,EQB,EPA,LEPC,YPD,etc.)

TABLE D-4
INITIATING CONDITIONS FOR CLASSIFICATION

CLASS	TAB-1 FIRE	TAB-2 RELEASE (SPILL)	TAB-3 LOSS OF UTILITIES	TAB-4 NATURAL PHENOMENON	TAB-5 LOSS OF ENVIRONMENTAL CONTROL	TAB-6 UNUSUAL OPERATIONS AND OTHER HAZARDS	TAB-7 EQUIPMENT FAILURE
MINOR UNUSUAL EVENT	FIRE LASTING LESS THAN 10 MIN.	UNUSUAL RELEASE OF REFINERY MATERIALS TO ENVIRONMENT ON/OFFSITE TRANSPORTATION RELEASE LESS THAN REPORTABLE QUANTITIES	LOSS OF "ONE" OF: *ELECTRICITY *COOLING WATER *DRY GAS *FUEL GAS *INSTRUMENT AIR *STEAM *WELL WATER	TROPICAL DEPRESSION WITHIN 72 HRS. OR 1000 MI EAST OF PR RAINFALL GREATER 3" IN 4 HOURS FLOODING IN THE REFINERY OR NO HIGHWAY 3 EARTHQUAKE AFFECTING P.R.	ODOR OFFSITE LEVEL-1 POLLUTION CONTROL EQUIPMENT MALFUNCTION EXCESSIVE SMOKING UNUSUAL FLARE SIZE SUSTAINED OR LOUD NOISES	MEDICAL EMERGENCY REQUIRING TRANSPORT EXPLOSION I	FIRE PUMP LOSS FLOOD CONTROL PUMP LOSS
MAJOR SITE EMERGENCY	FIRE LASTING MORE THAN 10 MIN. OR EMERGENCY EVENT REQUIRING ERB RESPONSE OR AFFECTING UNIT OPERATIONS	RELEASE EXCEEDING REPORTABLE QUANTITIES AND/OR POTENTIAL FOR IGNITION OFFSITE TRANSPORTATION RELEASE EXCEEDING REPORTABLE QUANTITIES	LOSS OF ANY COMBINATION OF: *ELECTRICITY *COOLING WATER *DRY GAS *FUEL GAS *INSTRUMENT AIR *STEAM *WELL WATER	HURRICANE PROJECTED WITHIN 48-24 HRS. EARTHQUAKE AFFECTING PRSOC FLOODING EXCEEDING REFINERY DRAIN SYSTEM CAPACITY	ODORS OFFSITE LEVEL II POLLUTION CONTROL EQUIPMENT FAILURE	MEDICAL EMERGENCY INVOLVING MULTIPLE INJURY/FATALITIES AIRCRAFT CRASH W/REFINERY STRUCTURE EXPLOSION II	RADIATION EVENT LOSS OF FIRE WATER MAJOR EQUIPMENT FAILURE AFFECTING EMERGENCY RESPONSE CAPABILITY INVERTER FAILURE
MAJOR GENERAL EMERGENCY	FIRE LASTING MORE THAN 30 MIN. OR REQUIRING UNIT/ REFINERY SHUTDOWN	RELEASE EXCEEDING REPORTABLE QUANTITIES AND LEAVING REFINERY PROPERTY AND/OR POTENTIAL FOR IGNITION	LOSS OF ALL UTILITIES	HURRICANE CONDITION PROJECTED WITHIN 12 HRS. OR ON SITE EARTHQUAKE CAUSING STRUCTURAL DAMAGE TO REFINERY	ODOR OFFSITE LEVEL-III POLLUTION CONTROL EQUIPMENT INOPERABLE FLARE FAILURE	EXPLOSION III EXPLOSION IN A UNIT AFFECTING REFINERY OPERATIONS	LOSS OF FIRE AND WELL WATER CATASTROPHIC EQUIPMENT FAILURE

E. NOTIFICATION METHODS

This section describes the method used for notification of Refinery emergency response personnel, Off-Site Agencies and Federal Emergency Response Centers. Actual methods and sequencing of notifications are covered in appropriate emergency response procedures. Figures E-1 and E-2 are examples of the notification forms used.

Notification of Refinery Personnel

The On-Scene Commander, or Incident Commander are responsible for classifying an event in the appropriate emergency class and then notifying Refinery personnel as needed. This notification could involve sounding the appropriate Refinery emergency alarm signal, making appropriate announcements over the Refinery radio system, telephone notification or pager notification.

The primary means for notification of personnel within the Refinery property is the Fire Whistle. Upon determination of a Refinery emergency or evacuation, the On-Scene Commander or Incident Commander will order an immediate sounding of Fire Alarm.

The Signals for Both of These Conditions are as Follows:

- Emergency : Fire Alarm (Assembly)
- Evacuation: Gas Alarm

The primary purpose for the Emergency Communication System is to enhance in-plant communication and notification of personnel throughout the Refinery during any type of emergency. Once 8888 is dialed, all Emergency Communication System Stations are capable of receiving Emergency Notification (control rooms, security, marine, and ECC). Visitors within the Refinery Property are Assigned to a Refinery individual. This individual is responsible for informing the visitors of emergencies when they occur and for taking action as necessary.

Refinery and contractor personnel are trained on actions to be taken in an emergency prior to their work assignments. The training includes instructions on the methods of notification and the required actions in the event of an emergency (Section O).

Notification of SCYI Corporate Personnel

Corporate personnel are contacted for various types of emergencies as indicated in table B-2.

The Shell Company President, Shell Company Security Director or Shell Company Emergency Manager should be contacted for some or all incidents.

Notification of the Municipality of Yabucoa

The On-Scene Commander/Incident Commander has to ensure that Notification Form, Figure E-1 is properly completed and that the HUMACAO DISTRICT CIVIL DEFENSE is notified promptly. The Emergency Response Shift Supervisor may make the notification depending on the particular conditions of the emergency .

Yabucoa Police Department and YABUCOA CIVIL DEFENSE will be responsible for notifying appropriate offsite emergency response personnel if necessary. The notifications to the YPD will be accomplished by use of commercial or cellular telephone or a combination of these by the HUMACAO CIVIL DEFENSE.

Hazardous Materials Release and Environmental Notifications

The On-Scene Commander is responsible for notifying the Environmnetal Officer when there is a hazardous materials release. Hazardous Materials Release Notification Figure E-2 is completed. The release of hazardous materials in excess of the reportable quantity must also be reported to the following agencies:

- Humacao District and Yabucoa Municipal Civil Defense Directors
- Commonwealth of Puerto Rico, EQB
- National Response Center (Only if a chemical from 40 CFR 302.4, CERCLA, is involved in the release.)

Notification of the Public

The Refinery will provide Municipal authorities with supporting information for public notification.

Notification of the public is the responsibility of the authorities and will be accomplished by utilizing Route Alerting. The Refinery will notify HUMACAO DISTRICT CIVIL DEFENSE 24 hour point which will in turn notify the Yabucoa C.D. to activate appropriate protective action recommendations.

Follow-up messages can be delivered to the public over commercial broadcast stations using the Emergency Broadcast System (EBS). Such messages will provide the public with instructions in regard to the specific protective actions to be taken by residents in affected areas.

FIGURE E-1
EVENT NOTIFICATION FORM

MESSAGE TIME: _____

1. THIS IS: [A] AN EMERGENCY EVENT [B] NOT AN EMERGENCY EVENT [C] A DRILL
2. EVENT STARTED AT: TIME _____ am/pm DATE ____/____/____
3. REPORTED BY: _____ PHONE NUMBER _____
4. LOCATION: _____ UNIT: _____

5. EVENT CLASSIFICATION [A] EMERGENCY EVENT [B] UNCLASSIFIED EVENT

[ ] MINOR-UNUSUAL EVENT	[ ] Fire	[ ] Near Miss
[ ] MAJOR-SITE EMERGENCY	[ ] Spill	[ ] Other
[ ] MAJOR-GENERAL EMERGENCY	[ ] Medical	

6. EVENT DESCRIPTION _____

_____

_____

***** (If event is NOT classified as an emergency, GO TO line 15.) *****

7. EMERGENCY DECLARED AT: TIME/DATE: _____ am/pm ____/____/____
8. EMERGENCY CONDITION: [A] IMPROVING [B] STABLE [C] DEGRADING [D] UNDETERMINED
9. EMERGENCY INVOLVES: [A] NO RELEASE [C] RELEASE OCCURRING: duration _____
   [B] POTENTIAL RELEASE [D] RELEASE OCCURRED: amount _____
10. TYPE OF RELEASE: [ ] SURFACE [ ] WATER [ ] AIR (gal., cu. ft., brls., lbs.)
    [A] GASES _____ [C] SOLIDS _____
    [B] LIQUIDS _____ [D] OTHER _____
11. UNIT STATUS: [A] SHUTDOWN: TIME _____ am/pm DATE ____/____/____
12. ESTIMATE OF PROJECTED OFFSITE RELEASE: [ ] NEW [ ] UNCHANGED

    ESTIMATED DURATION _____ hrs/min

distance	material deposited/dose rate
on site	_____
1 mile	_____
2 miles	_____
5 miles	_____
10 miles	_____

13. METEOROLOGICAL DATA: [ ] NOT AVAILABLE
    [A] WIND DIRECTION (from) _____ [C] STABILITY CLASS _____
    [B] WIND SPEED (mph) _____ [D] PRECIPITATION _____
14. RECOMMENDED PROTECTIVE ACTIONS:
    [A] NO PROTECTIVE ACTIONS
    [B] SITE ASSEMBLY
    [C] AFFECTED AREA EVACUATION
    [D] SITE EVACUATION
    [E] OFFSITE NOTIFICATION
    [F] OFFSITE SHELTER 1/2 MILE
    [G] OFFISTE EVACUATE 1/2 MILE
    [H] OTHER _____
15. EVENT TERMINATED AT: TIME _____ am/pm DATE ____/____/____
16. APPROVED BY: _____ TIME _____ am/pm DATE ____/____/____

DISTRIBUTION: OPERATIONS MANAGER, REFINERY MANAGER, RISK MANAGER, E P C, ON CALL MANAGER
VOICE MAIL NUMBER: (2425) (2102) (2300) (2236)

FIGURE E-2

EPA NOTIFICATION FORM

SPILL RESPONSE NOTIFICATION FORM

Reporter's Last Name: _____ First: _____ MI: _____
Position: _____
Phone Numbers: ( ) _____-_____, ( ) _____-_____
Company: _____
Organization Type: _____
Address: _____

City: _____ State: _____ Zip: _____

Were Materials Discharged? _____(Y/N) Confidential? _____ (Y/N)
Meeting Federal Obligations to Report? _____ (Y/N) Date Called: _____
Calling for Responsible Party? _____(Y/N) Time Called: _____

Incident Description

Source and/or Cause of Incident: _____

Date of Incident: _____ Time of Incident: _____ (AM/PM)
Incident Address/Location: _____

Nearest City: _____ State: _____ County: _____ Zip: _____
Distance from City: _____ Units: _____ Direction from City: _____
Section: _____ Township: _____ Range: _____
Container Type: _____ Tank Oil Storage Capacity: _____ Units: _____
Facility Latitude: _____ Degrees _____ Minutes _____ Seconds
Facility Longitude: _____ Degrees _____ Minutes _____ Second

Figure 3-1
SPILL RESPONSE NOTIFICATION FORM

EMERGENCY RESPONSE ACTION PLAN
SHELL CHEMICAL YABUCOA INC.

SPILL RESPONSE NOTIFICATION FORM (continued)

Material

CHRIS Code	Released Quantity	Unit of Measure	Material Discharged in Water	Quantity	Unit/ Meas.

Response Action

Actions Taken to Correct, Control or Mitigate Incident

Impact

Number of Injuries: _____ Number of Deaths: _____
Were there Evacuations? _____(Y/N) Number of Evacuated: _____
Was there any Damage? _____(Y/N) Damage in Dollars (Approx.) _____
Medium Affected: _____
Description: _____
More Information about Medium: _____

Additional Information

Any information about the incident not recorded elsewhere in the report:

Caller Notifications

EPA? _____(Y/N) USCG? _____(Y/N) State? _____(Y/N)
Other? _____(Y/N) Describe: _____

Figure 3-1 (Continued Page 2 of 2)
SPILL RESPONSE NOTIFICATION FORM

EMERGENCY RESPONSE ACTION PLAN
SHELL CHEMICAL YABUCOA INC.

FIGURE E-3

COAST GUARD NOTIFICATION FORM

Enclosure (1) to NVIC 7-92

INFORMATION ON DISCHARGE •

Involved Parties

(A) Reporting Party	(B) Suspected Responsible Party
Name	Name-
Phones ( ) -	Phones ( ) -
Company	Company
Position	Organization Type:
Address	Private citizen
Address	Private enterprise
	Public utility
	Local government
	State government
	Federal government
City	City
State	State
Zip	Zip

Were Materials Released (Y/N)?
Calling for Responsible Party (Y/N)?

Incident Description

Source and/or Cause of Incident

Date - - Time :
Cause

Incident Address/Location Nearest City

Distance from City
Storage Tank Container Type- Above ground (Y/N) Below ground (Y/N)
Unknown
Tank Capacity Facility Capacity
Latitude Degrees
Longitude Degrees
Mile Post or River Mile

Materials

Released Quantity	Unit of Measure	Released Material	Quantity in Water

Remedial Action

Actions Taken to Correct or Mitigate Incident

Impact

Number of Injuries Number of Fatalities
Were there Evacuations (Y/N/U)? Number Evacuated
Was there any Damage (Y/N/U)? Damage in Dollars

Additional Information

Any information about the Incident not recorded elsewhere in the report

Caller Notifications

EPA STATE USCG OTHER DESC

• • IT IS NOT NECESSARY TO WAIT FOR ALL INFORMATION BEFORE CALLING NRC.

Figure 5 USCG INFORMATION OF DISCHARGE FORM

F. EMERGENCY COMMUNICATIONS

This section describes the provisions for communications among the principal response organizations and among the Refinery emergency centers.

Communications with Community

The primary means of communication between the Refinery and YPD is the commercial telephone system.

Initially, the On-Scene Commander is in charge of communications with the community. Once the LEPC Liaison is activated, this person will be the primary contact to the community. At the Site or General Emergency, the Incident Commander is in charge of offsite communications.

Communications among the Command Post, Security Main Gate, Emergency Control Center, Refinery Medical Facility, Emergency News Center and Assembly Areas can be accomplished using normal Refinery telephones, and Refinery radio network. Communications available at each emergency response facility are as follows:

1. Command Post

   * One Cellular Telephone
   * One Refinery Radio (9 FRKQ)
     One Marine Radio

2. Security Main Gate

   * 8888 Emergency Telephone
   * Normal Refinery Phones
   * Base Station Radio Control
   * Refinery Paging and Beeper Systems

3. Emergency Control Center

   * 8888 Emergency Telephone
   * 1 Normal Refinery Extensions
     1 Outside Telephone Line
   * One Marine Radio
   * One Facsimile line (in engineering)
   * One Base Station Radio

4. Emergency News Center

* 3 Normal Refinery Extensions
* Telephones will be made available for use by the news media.
* One facsimile Line

5. Refinery Medical Facility

* Normal Refinery Phones
* One Outside Telephone Line
* One Base Station

Medical Support Facility Communications

Communications between Refinery, Yabucoa Municipal Hospital, Ryder Memorial Hospital and medical support facilities will be by commercial telephone. Ryder Memorial Hospital has pre-arrangements for selections of hospitals by intercommunications with other ambulances and hospitals when the hospital space is limited.

Alerting Emergency Response Personnel

As described in section E, notification of Refinery personnel will be completed through a combination of radios, pagers, Alarms and proceduralized telephone calls. Refinery emergency response personnel not on site at the time of the emergency will be notified by pager or by telephone call using commercial telephone system.

Communication System Test

As described in Section N, Communication channels with Response Organizations will be tested, using the extensions in the Security Main Gate, and Emergency Control Center, CP, and Oil Spill boat. Pager system is tested daily. In addition, all emergency communications systems are operationally checked at least monthly. All communications procedures and systems are also tested annually.

RADIO SYSTEM DESCRIPTION

Enclosed is a brief explanation of the radio systems in service at the Yabucoa Refinery. Each system is independent of the others, and will be discussed separately. All of the major systems shown here will appear on the consoles at the Main Gate and the Emergency Command Center.

1. Channel "1" is one of the four channels used by Operations, and is assigned to the Crude and Utilities areas. It is a repeater system with the transmitter located at the Main Control Room, has a backup battery to provide at least 24 hours of uninterrupted operation, and is wired to the control room emergency generator.

2. Channel "2" is a separate Operations channel, and is assigned to the Solvent/MEK area. It is a repeater system with the transmitter located at the Main Control Room, has a backup battery to provide at least 24 hours of uninterrupted operations, and is wired to the control room emergency generator.

3. Channel "3" is a separate Operations channel, and is assigned to the Hydrogen area. It is a repeater system with the transmitter located at the Main Electrical sub-station, has a backup battery to provide at least 24 hours of uninterrupted operation, but has no provision for emergency generator service.

4. Channel "4" is the Oil Transfer or Tank Farm channel. It is a repeater system with the transmitter located at the Tank Farm Control Room, has a backup battery to provide at least 24 hours of uninterrupted operation, and has emergency power from the Tank Farm generator.

5. Channel "5" is the Maintenance channel. It is a repeater system with the transmitter located at the Main Electrical sub-station, has a backup battery to provide at least 24 hours of uninterrupted operation, but has no provision for emergency generator service.

6. Channel "6" is the Plant Protection and Emergency Response channel. It is a repeater system with the transmitter located on the hill top at Mariana, has a backup battery to provide at least 24 hours of uninterrupted operation, and a 1400 watt portable generator, stored at the Main Gate, that can be taken to Mariana in the event of prolonged power outages. The control station located at the Emergency Command Center provides the link from the consoles to the repeater, but has no provision for backup battery.

7. Channel "7" is used for local paging, in conjunction with the repeater at Mariana. This repeater has a backup battery to provide at least 24 hours of uninterrupted operation, and like the Plant Protection channel, a 1400 watt portable generator, stored at the Main Gate, that is available in the event of prolonged power outages.

   The control station for this system is located in the Emergency Command Center, and provides the link from the consoles and dial-up pager encoder, to the selected repeater. There is no backup battery provided for this transmitter.

8. Channel "8" is the Emergency Brigade channel, and is restricted to those portables and mobiles used by Emergency Brigade. This is a simplex system with the base station located at the Emergency Command Center, and a position on the radio control console in the Emergency Command Center, but not in the console at the Main Gate.

9. Channel "9" is one of four "chatter" channels that provide frequencies that can be used by anyone, primarily Maintenance, to work on particular jobs that do not require a repeater or base station. An example of this would be a pair of electricians installing cable or calibrating instruments, and they would not bother or interfere with anyone else.

10. Channel "10" provides the same function as channel "9".

11. Channel "11" provides the same function as channel "9".

12. Channel "12" provides the same function as channel "9".

PAGING

The paging system consists of a telephone dial-up encoder located at the Emergency Command Center and a manual encoder located in the consoles at both the Main Gate and the Emergency Command Center.

The console encoders are the sole alerting unit for the Emergency Response Brigade. The dial-up encoder is programmed not to accept emergency pages, but in case of console failure, is capable of being re-programmed for back up use. The dial-up encoder can also be programmed to substitute page numbers in the event of a pager failure. The instructions are located with the dial up encoder.

In addition to the normal pagers, some of the portable radios in the plant are capable of being alerted by the paging system. However, to be able to receive the paging signals, the channel select switch must be in the "7", or paging position.

CONTROL STATIONS

Each of the operating areas have a control station, (a small, low power, multi-channel base station), that provides access to each of the five plant repeater channels, and the chatter channels. These units will not have access to the plant protection or the emergency response channels. The advantage of this method is that it eliminates the use of plant wire lines, and provides each operating position with access to the other operating channels as needed, and back up channels control in case of normal channel repeater failure. Each of the control stations in the Main and Utilities control rooms are wired into the respective UPS systems for uninterrupted operation. No other battery backup power is provided.

CONTROL CONSOLES

Located at the Main Gate and the Emergency Command Center are control consoles that provide an integrated operation of all of the major radio systems. Any of the systems may be accessed from either location, (except the Emergency Response system), and may even be cross connected if necessary. Functions other than plant radio controls are included in the consoles, and are listed below. A complete set of console operating instructions are maintained at each location.

OTHER CONSOLE FUNCTIONS

1. Marine channel 19A base for communicating with the tug boats, ships and certain Department personnel.

2. Monitor only for marine channel 16, the calling and emergency frequency, as required by law.

3. Monitor only of the NOAA weather channel, with an alert function to notify the console operator of any weather emergency.

4. Control of the Main and Plant vehicle gates. The consoles have been programmed to operate the turnstile and pedestrian gates if they are operational.

5. Unique paging coding functions for emergency response alerting.

In the Main Gate console only:

6. Fire alarm panel for the reporting of alarms from the warehouse and financial office. As of this date, they have been connected.

7. Intrusion alarms from the water wells.

8. The plant security CCTV system.

G. PUBLIC EDUCATION AND INFORMATION

This section gives a general description of the public education and information program about the REFINERY EMERGENCY RESPONSE PROGRAM. The detailed actions required to respond during an emergency, including rumor control, are contained in the emergency implementing procedures (EIP).

An **EMERGENCY NEWS CENTER (ENC)** facility to coordinate the release of information to the media and the public will be established to accommodate public information representatives from the Refinery, the Commonwealth of Puerto Rico, the Municipality of Yabucoa, and Federal Agencies. Coordinated briefings and media releases will be issued from this location.

The principal refinery contacts for the media will be the Incident Commander, the Refinery Manager, or the alternates for the Incident Commander position.

The Operations Training Area will be used as the ENC. The ENC will be the point of contact with the news media during an emergency.

The Spokesperson will have access to all necessary information to provide timely and accurate information to the media and the public. The Spokesperson will assure coordination of that information with local, commonwealth, and federal representatives and will seek reciprocal information from these organizations. The Refinery will make every effort to coordinate media briefings and statements issued to the public in conjunction with those organizations. The Refinery will accommodate, as conditions warrant, the use of photographic or TV equipment by the media.

To control rumors the ENC will release timely, accurate, and consistent information to the media and public. By having this single source of information rumors can best be controlled. Media monitoring will be conducted at the ENC to ensure that the news media is reporting accurate information to the public. Refinery personnel are instructed to refer all questions from the public and media to the ENC. The ENC will issue a number to be called during an emergency for timely and accurate information.

The Refinery will conduct training programs to acquaint local officials and the news media with emergency plans, hazardous materials at the Refinery, and points of contact for release of emergency public information. Participation by public officials and the media in training exercises will be solicited.

H. EMERGENCY FACILITIES AND EQUIPMENT

Response activities will be coordinated from emergency response facilities which are activated for each specific emergency classification. These facilities and associated equipment will be used for accident assessment and monitoring functions as described in this section.

EMERGENCY FACILITIES

1. Command Post (CP)

The Command Post (CP) is a mobile vehicle which can be moved to the Emergency Scene. The layout of the Command Post is shown in Figure H-1.

The Command Post provides the Emergency Response Brigade Captain with emergency response equipment and communications for response and coordination of the emergency.

The Command Post is equipped with the following communication equipment:

* SEE Section F.1 & Figure H-1

The Command Post contains the following documents:

* MSDS's
* Refinery Plant Layout (prints)
* Island Prints (local area) and (coastal area)
* Emergency Plan and Procedures
* DOT Hazmat Book

The Command Post contains the following equipment:

* Rescue Rope and Accessories
* Fire Proximity Suites (1)
* Portable Generator
* (2) SCBA's

The activation and operation of the Command Post is coordinated by the Tactical Officer or the Emergency Response Brigade Captain. The Command Post is the initial location for overall management of the emergency response.

2. Emergency Control Center (ECC)

The Emergency Control Center is activated for a MAJOR emergency classification and serves as the control center for overall management of the emergency response following initial response to recovery operations. The Emergency Control Center is the control point for the assessment and mitigation of plant systems, operations support, and transfer of information.

The Emergency Control Center consists of the Safety Training Room and several adjacent offices as shown in Figure H-2.

The Emergency Control Center is equipped with the following communications equipment:

* See Section F.3 & Figure H-2

The following Documents are available in the ECC:

* MSDS's
* Refinery Plant Layout (prints)
* Island Prints (local area) and (coastal area)
* Emergency Plan and Procedures
* DOT Hazmat Book

These documents are to be maintained in current form.

The following Emergency Response personnel will be assigned to the Emergency Control Center:

* See Section B Table B.1

The Incident Commander directs the operation of this facility.

3. Emergency News Center (ENC)

The ENC is the central point of the coordination and distribution of all information to the news media.

The ENC is located at the Operations Training Area as shown in Figure H-3.

The ENC is equipped with the following communications equipment:

* Refinery Telephones
* Radio

* Fax Line

The following documents are available at the ENC:

* Refinery Layout & Displays

* The Emergency Plan and Emergency Implementing Procedures

The following Emergency Response personnel are assigned to the ENC:

* See Section B, Table B-1

The INFORMATION OFFICER directs the operation of the ENC.

4. Refinery Medical Dispensary

The Medical Dispensary is the central location for treatment of injured employees. The dispensary is staffed by the Refinery Physician and a registered nurse during the day shift. The dispensary is equipped to handle most injuries and is backed up by hospitals in Yabucoa and Humacao. Back-shift medical emergencies and transportation of injured personnel is handled by the Emergency Response Shift Supervisor with the assistance of the on-shift certified Medical Technicians.

ACTIVATION AND STAFFING OF EMERGENCY RESPONSE FACILITIES

During the initial stages of an emergency, the MINOR-UNUSUAL EVENT classification emergency response activities are directed from the COMMAND POST (CP).

Upon declaration of a MAJOR-SITE EMERGENCY or MAJOR-GENERAL EMERGENCY, all emergency response facilities are activated. The EMERGENCY CONTROL CENTER will have direction and control of response to the emergency.

EMERGENCY EQUIPMENT

Emergency equipment for Hurricane, Oil Spill, and Fire emergency response is stored in various locations throughout the Refinery. Emergency equipment consists of fire trucks, rescue vehicles, ambulance, first aid kits, Scott air packs, fire extinguishers, acid suits, proximity suits, fire protection clothing, oil spill response supplies, hurricane response supplies, and fire fighting foam. The Emergency Preparedness Maintenance procedures require inspection and operational testing of this equipment on a regular basis and after each use to maintain a state of readiness. Applicable equipment is calibrated in accordance with manufacture's recommendations. Spares of certain equipment are maintained to replace inoperative or out of calibration equipment.

METEOROLOGICAL MONITORING

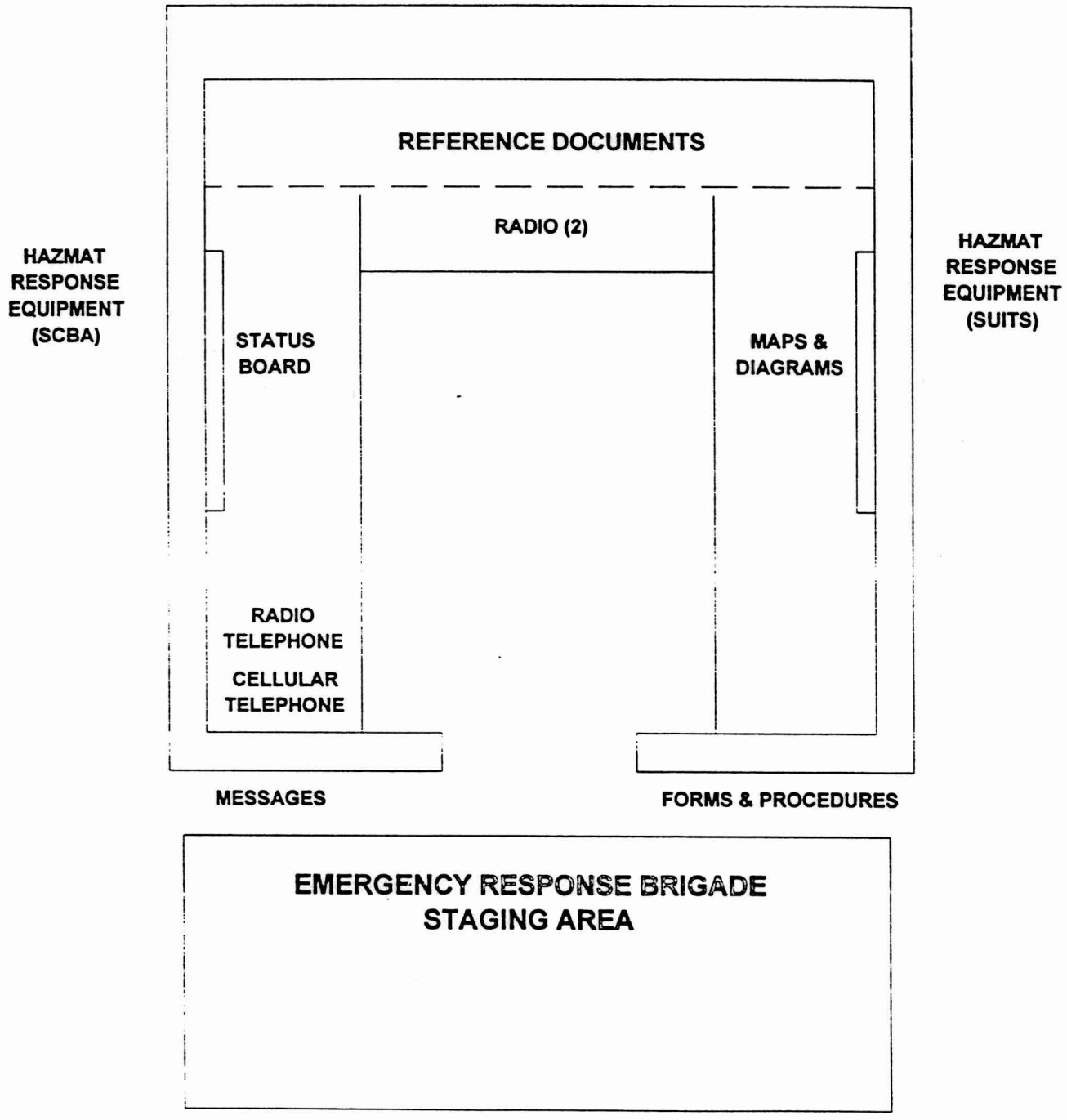
Site meteorological data is not available at this time. Information relative to adverse weather condition response is available from the National Weather Service via internet.

RELEASE MONITORING

Hazardous materials release alarms are located within appropriate units at the refinery. These alarms are monitored by the various control rooms throughout the refinery.

FIGURE H-1

FIELD COMMAND POST (FCP)



SU-104e

FIGURE H-2

EMERGENCY CONTROL CENTER (ECC)

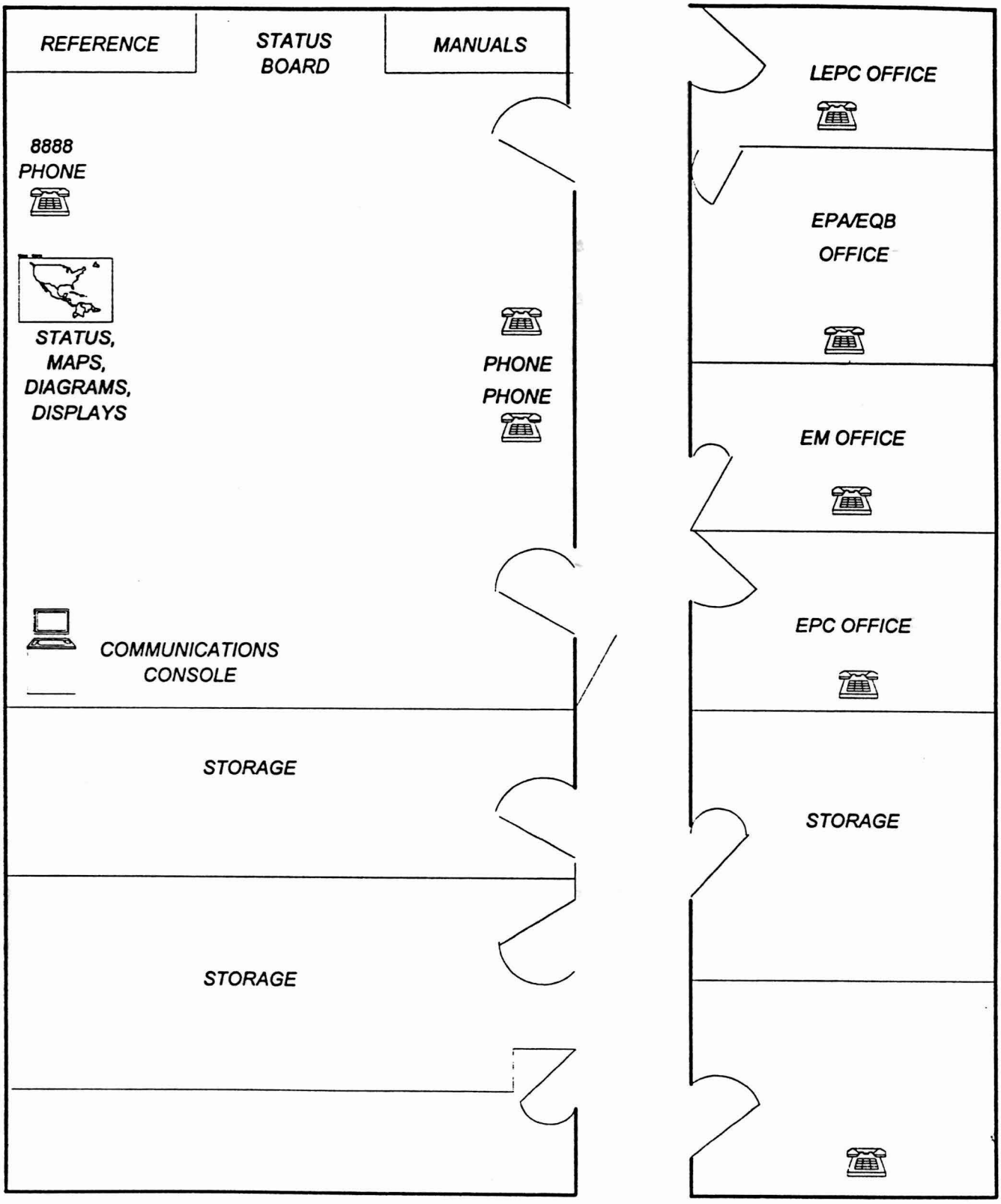
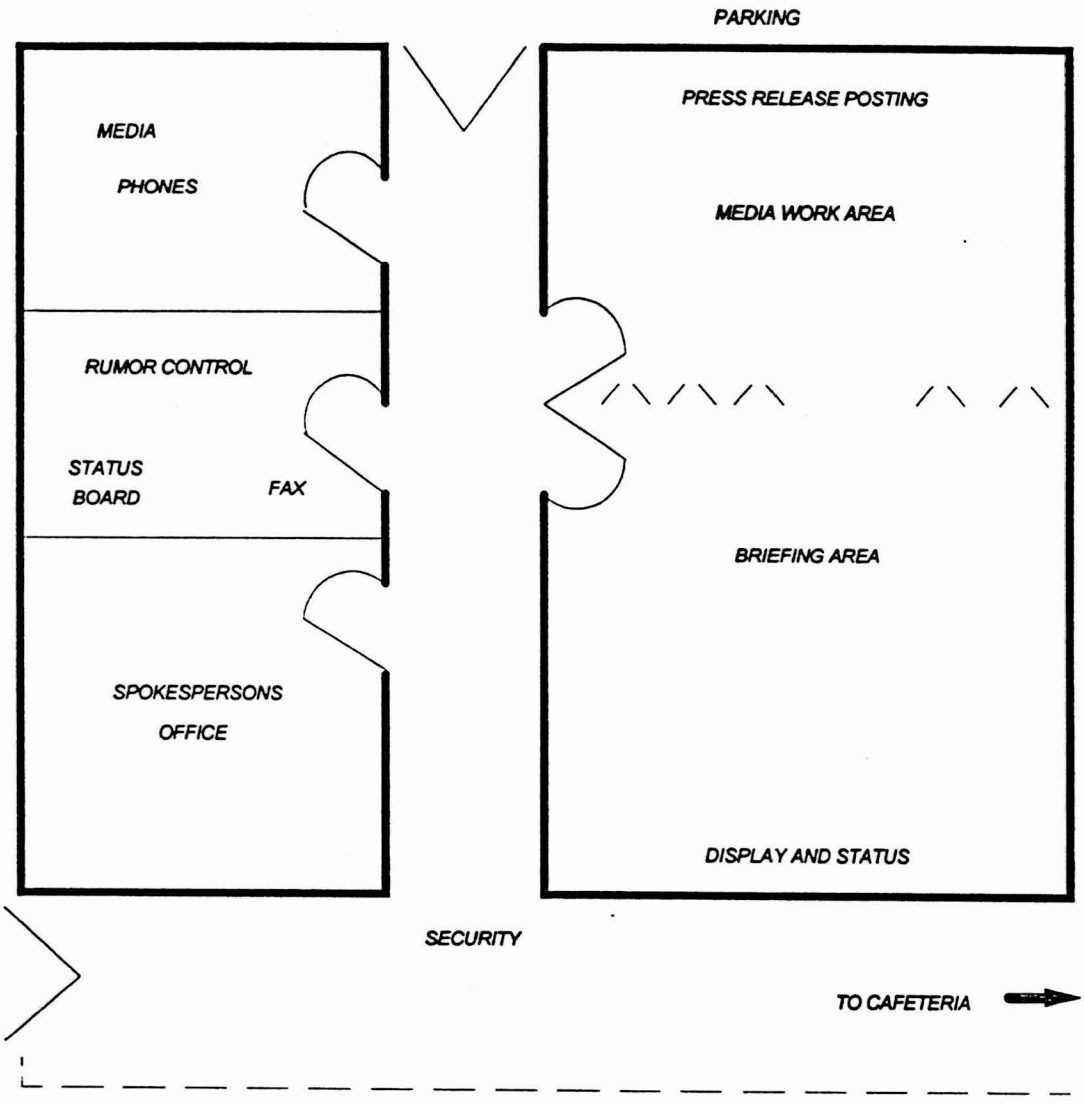


FIGURE H-3

EMERGENCY NEWS CENTER (ENC)



SLI-104g

I. EMERGENCY ASSESSMENT

This section describes the methods, systems, and equipment available for assisting actual or potential onsite or off-site consequences of an emergency. Initial assessments are the responsibility of the Affected Area Shift Supervisor using available shift personnel including the ERSS. Subsequent assessment actions are done in conjunction with the On-call Manager or the On-Scene Commander\Incident Commander with the assistance of the Emergency Brigade Captain at the Command Post or Emergency Control Center.

The Affected Area Shift Supervisor should gather the facts, asses the situation, and develop a plan of action. The assessment should be based on existing conditions, an estimate of escalation probability, area of impact, and an estimation of resources available at the time of the emergency.

- Time of emergency;
- Location of emergency;
- Nature of emergency;
- Expected duration;
- Exposure to personnel;
- Unit or equipment involved;
- Root cause of emergency;
- Possibility of escalation
- Off-site exposure;
- Possibility of explosion;
- Weather conditions;
- Additional assistance required/available;
- Water/foam supplies;and
- Notifications required (off-site and regulatory).

HAZARDOUS MATERIALS RELEASE ESTIMATION

A plume dispersion system exists to estimate release concentrations from continuous air pollutant emission. The system uses as input the chemical or product name, type of event, average wind speed, volume, ambient temperature, relative humidity and ground surface type. The computer model can be used to calculate and plot concentration profiles to aide in the development of **pre-planned** protective assumptions. These assumptions can be used as a guide for pre-determined PROTECTIVE ACTION RECOMMENDATIONS (PAR) and estimation of TOTAL POPULATION EXPOSURE in Recovery.

J. PROTECTIVE RESPONSE

This section describes the protective actions developed to limit the exposure of Refinery personnel and the public following a release of hazardous materials at the Refinery. This section addresses response conditions at a MAJOR-SITE or MAJOR-GENERAL EMERGENCY classification. Protective actions at the MINOR-UNUSUAL EVENT classification would be taken at direction of the Affected Area Shift Supervisor or Production Manager.

PROTECTIVE RESPONSE FOR ONSITE PERSONNEL

Protective response for onsite personnel, visitors, and contract personnel includes alerting, assembly and accountability, evacuation, monitoring, and decontamination.

1. Alerting

   SEE SECTION E, NOTIFICATION METHODS.

2. Assembly and Accountability

   EMERGENCY RESPONSE ORGANIZATION (ERO)

   ERO personnel are assigned to Emergency response facilities in which the facility coordinator will be responsible for maintaining accountability of personnel. Emergency personnel located within the Control Rooms and the Maintenance shop will report their accountability to the Emergency Control Center.

   NON-EMERGENCY RESPONSE PERSONNEL

   Refinery personnel not assigned to the ERO will procede to their designated assembly area. As these individuals report to the assembly area, they will be logged in and accounted for and await further instructions.

   Visitors will report to the Security Main Gate, be accounted for and released. Sun employees from other facilities may be retained for response assistance at the discretion of the Incident Commander.

3. Search and Rescue

   If accountability reveals a missing person, the ON-SCENE COMMANDER will assemble a search and rescue team from Emergency Response Brigade members. The Search and Rescue team will obtain information on missing persons work assignment location and search likely areas until missing person is found.

4. Refinery Evacuation

Evacuation of non-essential personnel is ordered by the Incident Commander whenever a threat to the safety of refinery personnel is determined.

Based on that decission non-essential personnel, visitors, and contractors will procede to designated assembly areas for further instruction or be sent home. Directions as to evacuation routes, future availability, and emergency status will be provided to evacuees.

5. Monitoring and Decontamination

During emergency response operations affected areas will be monitored to minimize personnel contamination and the spread of contaminate. Decontamination areas will be established to clean and contain hazardous materials within the affected area.

6. Use of Refinery Protective Equipment and Supplies

PRSOC maintains an inventory of emergency protective equipment and response materials sufficient for extended emergency response. Personnel within the ERB are certified for Hazmat Response, trained in response techniques and protective equipment use.

PROTECTIVE RESPONSE FOR THE PUBLIC

The Refinery is responsible for ensuring that timely protective action recommendations (PAR) for the public reach appropriate Local Officials. These officials are then responsible for implementing those PAR's.

1. Alerting

See Section E, Notification Methods.

2. Protective Action Recommendations

The ON-Scene Commander/Incident Commander is responsible for providing PROTECTIVE ACTION RECOMMENDATIONS (PAR) to LOCAL OFFICIALS as part of the initial notifications and follow-up communications. These recommendations are based on assesment actions as described in Section I of the Plan. Using available information, the PAR's contain such actions as: traffic control, barricades, shelter or evacuate population in a specific area, and other concerns related to the emergency situation.

3. Evacuation

PAR's recommend evacuation must take into account weather conditions and the time needed to complete the evacuation.

K. HAZARDOUS MATERIALS EXPOSURE CONTROL

Emergency Exposure Guidelines

During an emergency, hazardous materials exposures may be higher than those during normal operation. These higher exposures may have to be experienced to complete protective, corrective, or lifesaving actions. Under all such situations, every reasonable effort will be made to rescue and maintain exposures at or below the permissible exposure limits of substances regulated by 29 CFR 1910, Subpart Z.

Industrial Hygiene Program

A Medical Surveillance Program has been established by PRSOC for all employees who may be exposed to hazardous substances or health hazards.

L. MEDICAL AND PUBLIC HEALTH SUPPORT

Refinery Capability

Provisions have been made to assist personnel who are injured, or who have been externally contaminated. Decontamination materials and portable first aid kits are available at the Fire Station and Refinery Infirmary. There are personnel on shift (Emergency Response Brigade members) and in the Refinery emergency response organization designated to respond to a medical emergency. Where contamination of open wounds is involved, personnel may be immediately transported to the Medical Center or appropriate medical facility, where they will receive prompt medical attention.

Also, for medical emergencies at the Refinery, there is a fully equipped medical facility staffed by a licensed physician and registered Industrial Nurse. During the normal working hours (Monday through Friday), this staff is available to assist the Emergency Response Brigade. This staff will also provide consultation to the local medical facilities concerning hazardous materials exposures to the public.

Medical Transportation

A class II ambulance is maintained on site with ERO personnel as operators.

Arrangements have been made with the Humacao District to provide ambulance support for the Refinery if required. Request for this assistance would be through the Yabucoa Municipal or Humacao District Civil Defense Offices.

Offsite Services

Local medical facilities are equipped to handle medical emergencies from the Refinery. Ambulances should be directed to take the individual to the appropriate medical facility for prompt medical attention.

Training of Medical Support Personnel

Section O, Emergency Response Training, identifies the training that will be provided for Refinery personnel who have support responsibilities. Retraining consists of repetition of the initial training, and improvements learned from the previous year's experiences. Drills and exercises are an integral part of the training program and conducted as specific in Section N, Exercises and Drills.

M. RECOVERY AND RE-ENTRY PLANNING

The objectives of the Refinery following any emergency declaration will be to alleviate the consequences of the event and to take those steps described in the Emergency Response Plan which will minimize any effects on the health and safety of the Refinery workers and public. Once the emergency situation has ended, the goal will be to restore the Refinery to normal operating status. For some situations, such as an unusual event, the emergency situation may not have required any change from normal operations so no formal transition will be required. In other circumstances which may involve probable or actual damage to the Refinery, a transition will be appropriate. This is defined as the **Recovery Phase**.

Each member of the **Recovery Organization** shall maintain a record of pertinent Refinery activities. Information such as the date, time and brief summary of the activity performed shall be noted.

The Incident Investigation Chairman is responsible for collecting all logs, forms, etc. for record keeping purposes and to conduct an investigation of the emergency response activities upon termination of the emergency.

Commencement of Recovery Phase

The Incident Commander will determine when the Recovery Phase begins. The following guidelines, as applicable to the specific situation, will be observed prior to ending the emergency:

1. The affected unit is in a stable condition and can be maintained in that condition indefinitely.

2. Releases of hazardous materials to the environment have ceased or are being controlled within permissible limits.

3. Fire or similar emergency conditions no longer constitute a hazard to personnel or equipment.

4. That NATURAL PHENOMENA conditions are no longer affecting or threatening PRSOC.

Once the above conditions have been satisfied, the Incident Commander will announce that the emergency is terminated and the Refinery is in the Recovery Phase. At this time, the Incident Commander or designee will become the **Recovery Manager**.

Recovery Organization

Initially, the Recovery Manager will direct operations from the Emergency Control Center. He/she will structure the **Recovery Organization** to accomplish the following general objectives:

1. Control access to the affected area of the Refinery and exposures to the workers.

2. Decontaminate affected areas and equipment.

3. Conduct activities in contaminated areas in accordance with the Refinery's standard work permit practices.

4. Isolate and repair damaged systems.

5. Document proceedings of the incident and review the effectiveness of the emergency response organization in alleviating Refinery damage and reducing exposures to the Refinery workers and public.

6. Provide offsite authorities with Refinery status reports and information concerning the Refinery Recovery organization.

7. Provide public information on the status of Recovery operations via releases to the media.

Individuals will be assigned to specific positions by the Recovery Manager, depending on the nature and extent of damage to the Refinery.

Re-entry Planning

If the emergency situation involved a release of hazardous material, appropriate areas of the Refinery will be monitored to determine the extent of contamination and concentration. When Re-entry to a contaminated areas is required for inspection or work, the activity will be preplanned and Refinery safety practices will be followed.